PSYCHOLOGICAL ABSTRACTS

VOL. XIII, No. 12 DECEMBER, 1939

GENERAL

(incl. Statistics)

5975. **[Anon.] Presidents of the association. Samuel W. Hartwell, M.D., 1939–1940.** *Amer. J. Orthopsychiat.*, 1939, **9**, 467.—This is a brief sketch of the life of Dr. Hartwell and a greeting to him in his position as president of the American Orthopsychiatric Association for the term 1939–1940. Portrait.—*R. E. Perl* (New York City).

5976. **[Anon.] Havelock Ellis, 1859–1939.** *Psychoanal. Quart.*, 1939, **8**, 385.—In this brief obituary of Havelock Ellis, emphasis is placed upon his contributions as a scholar in the field of sex and his accumulation of factual data in a field overrun with theory.—*M. H. Erickson* (Eloise Hospital).

5977. **Baeyer, W. v. Über die Zusammenhänge von Seele, Leben, Zeit und Begriff in Hegels Philosophie.** (The relations among mind, life, time, and concept in Hegel's philosophy.) Würzburg: Triltsch, 1939. Pp. 57.

5978. **Beck, M. Psychologie. Wesen und Wirklichkeit der Seele.** (Psychology. The nature and reality of the mind.) Leyden: A. W. Sythoff's Uitgeversmij, 1938. Pp. 271.—A search for a metaphysical and phenomenological foundation.—*R. C. Givler* (Tufts).

5979. **Bentley, A. F. Postulation for behavioral inquiry.** *J. Phil.*, 1939, **36**, 405–413.—Five postulates for inquiry into behavior in terms of the total organism-environment situation are suggested: (1) All existence asserted shall be stated-existence, not named-existence. Naming shall be subsidiary to statement, and named-existence may not be allowed to pass beyond the range of stated-existence. (2) Absolute Newtonian space-time shall not be used, but as in physics, students of behavior shall choose their own frames of space and time to fit the facts. (3) Direct observation shall be permitted for all organism-object situations, with freedom for direct factual report thereon. (4) Organism and objects of the environment shall not be treated as unconnected things, but as interrelated active and passive observed behavior-forms. (5) Object and organism together shall be a sufficient base for behavioral inquiry, without the necessity of such third factors as, e.g., "brain." Remarks on a behavioral, situational reconstruction of sociological inquiry are appended to the above.—*J. G. Miller* (Harvard).

5980. **Bolles, M. M. & Zubin, J. A graphic method for evaluating differences between frequencies.** *J. appl. Psychol.*, 1939, **23**, 440–449.—A graphic method is described for determining the significance of the difference of frequencies of contrasted groups. When the number of desired comparisons is over 30 there will be a considerable saving of time. Checking of the values of chi-square is not necessary, since gross errors may be easily found from inspection of the graph.—*E. E. Ghiselli* (California).

5981. **Bonaparte, M. L'inconscient et le temps.** (The unconscious and time.) *Rev. franç. Psychanal.*, 1939, **11**, 61–103.—The child, in whom the unconscious dominates and whose preconscious develops slowly, has only a vague concept of time. Adults and timepieces gradually complete this part of his education. The adolescent does not feel the restraining hand of time because of the strong pressure of his awakening instincts. With the adult development of consciousness, time acquires a new aspect of prosaic precision. However, each night we again lose the concept of time, as we do in our waking state while daydreaming or using our imagination. Again, amatory activities, mystical experiences, and various toxins enable us to escape from time. More lasting relief is sought in magic, prayer, and science to postpone the inevitable death which time brings us ultimately. After imagining a life after death to avoid time's finality, refuge is found in philosophies which have created a timeless universe. Thus man forever remains incapable of changing his unconscious desire to ignore time.—*H. Beaumont* (Kentucky).

5982. **Branham, V. C. [Ed.] Journal of criminal psychopathology.** Woodbourne, N. Y.: Woodbourne Institution for Defective Delinquents, New York State Department of Correction. Volume 1, No. 1, July, 1939. Quarterly.

5983. **Brock, F. Typenlehre und Umweltforschung. Grundlegung einer idealistischen Biologie.** (Theory of types and study of environment. A foundation for an idealistic biology.) Leipzig: Barth, 1939. Pp. 40. RM 4.20.—This book is based on a study of the behavior of crabs and snails, and submits that the method of environmental research proposed by Uexküll is a continuation of the idealistic morphology of Cuvier and Goethe. It eliminates the weaknesses of Darwinism, which often was too theoretical to conform to reality, and of "scientific biology," which used methods derived from classical physics.—*F. Brock* (Hamburg).

5984. **Clapp, J. G. Locke's conception of the mind.** New York: Journal of Philosophy, Inc., 1937. Pp. iv+122. $1.00.—This doctoral dissertation investigates the meaning of the term "mind" in Locke's "Essay concerning Human Understanding." The author finds that to discover it he has to examine what Locke has to say concerning "ideas,"

"qualities," "power," "substance," and "knowledge." Locke, comparing ideas in the mind to images in a dark room, thinks of mind as the locus of ideas, originally empty, but gradually furnished by experience resulting from contacts among bodies. He also thinks of the mind as a substance, viz., as the togetherness of certain powers and operations such as thinking, willing, perceiving, and intuiting, upon ideas.—*C. J. Ducasse* (Brown).

5985. **Clark, G. The use of the Horsley-Clarke instrument on the rat.** *Science*, 1939, **90**, 92.—The adaptation of the Horsley-Clarke apparatus for use on the rat is described, and instructions for use and operative procedure are given.—*F. A. Mote, Jr.* (Brown).

5986. **Cory, D. The private field of immediate experience.** *J. Phil.*, 1939, **36**, 421–427.—In waking perception as well as in our dream life, what we are immediately acquainted with is not the surface qualities of physical objects in a public space (as the crude experience of the layman seems to countenance), but rather sensuous constructions in a private field of perception, which we spontaneously take to be physical objects in the same way that we do in dreams. Since one must believe in the independent existence of physical objects, it follows that our perceptual knowledge of things is for the most part symbolic.—*J. G. Miller* (Harvard).

5987. **Costa, A. Tendenze odierne della psicologia in Germania.** (Contemporary tendencies in psychology in Germany.) *Arch. ital. Psicol.*, 1938, **16**, 135–145.—According to Jaensch, president of the German Psychological Society, psychology in the Germany of today has attained a more practical and important standing by aiming at nationalistic and, in a broader sense, humanistic goals, while losing none of its dignity as a theoretical and cultural discipline.—*H. Beaumont* (Kentucky).

5988. **David, F. N. Tables of the distribution of the correlation coefficient.** London: Biometrika Office, University College, 1938. Pp. 92.—The volume contains: (1) an introduction with sections treating the construction of the tables, methods of interpolation, and theory of various correlation problems; (2) the main tables, giving the ordinates and probability integral of the distribution of the product-moment coefficient in random samples of size 3, 4, . . . 24, 25, 50, 100, 200, 400 for correlations 0.0, 0.1, . . . 0.9 of a bivariate normal population; and (3) auxiliary charts presenting belts for graded series of sample sizes for rapid extraction of significance levels and confidence intervals.—*N. R. Bartlett* (Brown).

5989. **Elmgren, J. Gestalt psychology. A survey and some contributions.** *Göteborgs Högsk. Årsskr.*, 1938, **44**, No. 4. Pp. 299. Kr. 10.—Gestalt psychology developed as a new form of interpretation which grew out of experiments on the perception of movement. Later, perception in general and the whole field of psychological subject matter became incorporated into this explanatary system. Gestalt psychology describes the organization of experience in terms of field laws. This book treats of experiments on stroboscopic movement, and interprets them from a Gestalt viewpoint. The study includes the effects of both mental set and size of figure upon experienced motion. Three-dimensional stroboscopic movements are shown to be the results of laws of behavioral organization, which dominate over the factor of "corresponding points." Gestalt interpretations are then applied to memory. Retroactive inhibition is said to be governed by the principles of trace interaction. The dynamics of trace aggregation and segregation describe the results of grouped and isolated series, investigated by von Restorff. Hartgenbusch's investigations show trace transformations to be directional and not chaotic or lawless. Zeigarnik's experiments with completed and incompleted tasks show the effect of a system under tension upon availability. The book terminates with Koffka's view of memory: temporal processes leave spatial dynamic trace columns.—*G. W. Knox* (Ohio).

5990. **Flanagan, J. C. Note on calculating the standard error of measurement and reliability coefficients with the test-scoring machine.** *J. appl. Psychol.*, 1939, **23**, 529.—Since the International test-scoring machine can yield in a single reading the difference between the scores on the odd and even items on a test, the standard deviation of the difference between these scores can easily be computed. From this constant the reliability coefficient can be obtained by the formula

$$r_{11} = 1 - \frac{\sigma_D^2}{\sigma_w^2}$$

where σ_D^2 is the variance of the difference scores and σ_w^2 is the variance of the ordinary test scores including both odds and evens.—*E. E. Ghiselli* (California).

5991. **Geary, R. C., & Pearson, E. S. Tests of normality.** London: Biometrika Office, University College, 1938. Pp. 16.—Upper and lower 5% and 1% significance levels for various size samples from a normal population are provided for three test criteria.—*N. R. Bartlett* (Brown).

5992. **Ghiselli, E. E. Essential conditions in the determination of the extent of trait variability.** *J. appl. Psychol.*, 1939, **23**, 436–439.—Essential conditions which must be met in order to obtain an accurate estimate of the extent of trait variability are discussed. Hull's estimate that the range of abilities displayed by an individual is 80% as great as individual differences fails to fulfill all of these conditions. Many writers uncritically quote this figure, overlooking the fact that in his original treatment Hull was simply presenting the idea of trait variability and illustrating the methodology underlying estimates of its extent.—*E. E. Ghiselli* (California).

5993. **Goldstein, K. The organism. A holistic approach to biology derived from pathological data in man.** New York: American Book, 1939. Pp. xvii+533. $4.00.—The author first discusses the problem of the determination of symptoms and the nature of "ordered" and "disordered" behavior. Atomistic methods are criticized and the theory of

reflex structure considered. This is followed by chapters on the function of the nervous system as a foundation for a theory of the organism, and the modification of function due to impairment. In these sections the law of equalization toward an "adequate" average level and the concepts of "catastrophic" reaction (shock to organism endangering its continuity as a system) and dedifferentiation (increase in the uniformity of processes) are discussed. "The nature of partitive processes" considers the nature of reflexes and their meaning, conditioned reflexes, instincts, and drives. The next two chapters are concerned with the organism as a whole from a conceptual standpoint and with respect to certain essential characteristics of it in the light of the holistic approach. Among the latter are anxiety, unconsciousness, and body-mind unity. There are further chapters on "Gestalt psychology and the theory of Gestalten," "The nature of biological knowledge," "Norm, health and disease," "The problem of organismic hierarchy," and "Knowledge and action." Index and bibliography. —*D. Shakow* (Worcester State Hospital).

5994. **Gray, C. T., & Votaw, D. F. Statistics applied to education and psychology.** New York: Ronald Press, 1939. Pp. xiv+278. $3.25.—This is a text for students with no special training in mathematics. Practical applications and interpretations are associated throughout with techniques. The chapter headings are: making data meaningful, the arithmetic mean, other measures of central tendency, percentiles, measures of variability, the normal probability curve and reliability, further applications of the probability curve, correlation, interpretations and uses of correlation, other types of correlation. A series of tables, a bibliography, and answers to the exercises and problems are appended.—*J. McV. Hunt* (Brown).

5995. **Hanford, H. M., & Morgan, C. T. A simplified lever-operated feeding device for conditioning studies in rats.** *J. gen. Psychol.*, 1939, **21**, 229–232.—A modification of the Skinner apparatus in which a rat receives food when he presses a lever is described.—*C. N. Cofer* (Brown).

5996. **Hardie, C. D. Our knowledge of other minds.** *Phil. Sci.*, 1939, **6**, 309–317.—The author tries to give an account which, while depending on analogy, will nevertheless give us certainty that other minds exist. In this enterprise he builds upon N. R. Campbell's analysis of a physical theory into the "hypothesis," which consists of statements about mathematical variables, and the "dictionary," which correlates these variables with observable phenomena. Applying this analysis to the problem of other minds, it is found that we have as much certainty of their existence as we have of that of molecules or billiard balls. The distinctions which have been made in this discussion are also of value in putting an end to the controversy between purposive and non-purposive psychology and in clarifying the psychoanalytic conception of the unconscious.—*R. H. Dotterer* (Pennsylvania State).

5997. **Heron, W. T., & Skinner, B. F. An apparatus for the study of animal behavior.** *Psychol. Rec.*, 1939, **3**, 166–176.—A description with illustrations of an apparatus for the study of the behavior of large groups of rats or other small mammals. 24 individual chambers are operated simultaneously by either manual or automatic control. Unusual economy of time and labor is achieved, particularly by immediate mechanical recording of mean curves and in the control of variables.—*P. S. de Q. Cabot* (Simmons).

5998. **Herrick, C. J. A neurologist makes up his mind.** *Sci. Mon., N. Y.*, 1939, **49**, 99–110.—A naturalistic account of "mind" showing how far we can go in the exploration of the mental life without overstepping the boundaries of the natural order.—*O. P. Lester* (Buffalo).

5999. **Humm, D. G. Discussion of "A statistical analysis of the Humm-Wadsworth Temperament Scale."** *J. appl. Psychol.*, 1939, **23**, 525–526.—Kruger's analysis of the Humm-Wadsworth Temperament Scale is criticized on the basis of inadequate sampling, absence of criteria, and unsound mathematical treatment.—*E. E. Ghiselli* (California).

6000. **Kappauf, W. E. An apparatus for the study of alternation behavior in the cat.** *Psychol. Bull.*, 1939, **36**, 521.—Abstract.

6001. **Kelley, T. L. Two statistical notes.** *Psychol. Bull.*, 1939, **36**, 530.—Abstract.

6002. **Kelly, G. A. The person as a laboratory subject, as a statistical case, and as a clinical client.** *Proc. Ind. Acad. Sci.*, 1939, **48**, 186.—Abstract.

6003. **Kreutz, M. Psychologiczne projecia opisowe.** (Descriptive terms in psychology.) *Prace Inst. Psychol. Uniw. Jana Kazimierza*, 1939, **1**, No. 5. Pp. 68.—The author presents his attempt to improve the logical precision of terms used in the description of psychological facts. He believes in collecting facts rather than in developing theories, but emphasizes the need of a precise psychological vocabulary. There is a 2-page French summary.—*Z. Piotrowski* (Columbia).

6004. **Kurtz, A. K., & Edgerton, H. A. Statistical dictionary of terms and symbols.** New York: Wiley, 1939. Pp. xiii+191. $2.00.—Approximately 2000 terms and symbols are defined and illustrated by the authors with the help of an advisory council. Formulae are only sparingly included.—*W. S. Hunter* (Brown).

6005. **Leeper, R. Some critical revisions and extensions of Lewin's topological and hodological psychology.** *Psychol. Bull.*, 1939, **36**, 502.—Abstract.

6006. **Lewinski, R. J., & Feder, D. D. Science versus sensationalism in psychology for the layman.** *J. appl. Psychol.*, 1939, **23**, 429–435.—Academic psychologists have been so concerned with establishing psychology as a respectable science that they have overlooked the keen interest of the public. Popular psychology magazines have capitalized on this interest, but give a distorted view of the field

to the layman. In order that this situation be remedied it is urged that the American Psychological Association sponsor a popular magazine similar to *Hygeia*, published by the American Medical Association.—*E. E. Ghiselli* (California).

6007. **Marx, E. Die Entwicklung der Reflexlehre seit Albrecht von Haller bis in die zweite Hälfte des 19. Jahrhunderts.** (The development of the reflex theory from Albrecht von Haller to the second half of the 19th century.) Heidelberg: Weiss in Komm., 1939. Pp. 126. RM. 3.20.

6008. **McNemar, Q. Sampling in factor analysis.** *Psychol. Bull.*, 1939, **36**, 530.—Abstract.

6009. **Moore, T. V. Cognitive psychology.** Philadelphia: Lippincott, 1939. Pp. viii+636. $3.75.—Cognitive psychology is defined as that branch of general psychology which concerns the way in which the human mind receives impressions from the external world and interprets the impressions thus received. The book is intended as a text. The argument is divided into 7 parts: consciousness and the nervous system; landmarks in the theory of perception; the psychology of perception; the pathology of perception; the human intellect; the psychology of memory; the relation between body and mind. The writer has made no attempt to avoid philosophical issues, and he has summarized many of the pathological findings in this field.—*J. McV. Hunt* (Brown).

6010. **Morgan, C. T. Studies in vision. I. A technique for the study of visual discrimination in the rat.** *J. comp. Psychol.*, 1939, **28**, 73–79.—This apparatus utilizes lever depression and an electrical feeder. Its chief advantages are "(1) the automatic control of reward, shock, and stimulus changes; (2) the elimination of handling of the rat and accompanying experimental limitations; (3) an increase in efficiency due to the large number of responses which may be secured in one experimental session and to the simultaneous operation of several discrimination boxes." 100 trials may satisfactorily be obtained in one session requiring about one-half hour. High accuracy in the discrimination of a dark from a lighted panel was obtained in the first 200 trials.—*N. L. Munn* (Vanderbilt).

6011. **Muenzinger, K. F. The unit of description in psychology.** *Psychol. Bull.*, 1939, **36**, 507.—Abstract.

6012. **Müller-Freienfels, R. Geheimnisse der Seele.** (Secrets of the mind.) (2nd ed.) Amsterdam: Tiefland Verl., 1937. Pp. 349.

6013. **Roback, A. A. The psychology of common sense.** Cambridge, Mass.: Sci-Art Publishers, 1939. Pp. 350. $3.00.—Common sense is defined as "the common residue which settles out of the various individual experiences." A series of non-technical essays deals with such topics as the following: what is sanity? Sex in dynamic psychology; the neurotic through the ages; the infantilism of America; the "new" psychology; technological Fascism and psychology; the quack in psychology; the psychology of success; marriage lore; graphology as seen by the psychologist; music and moronity; significance and the condition of fundamental preclusion; the concept of character in a dictator-ridden world.—*D. G. Ryans* (William Woods College).

6014. **Scheidemann, N. V. Experiments in general psychology.** Chicago: Univ. Chicago Press, 1939. Pp. xiii+201. $1.75.—A revision and enlargement of the earlier edition. The 81 experiments are divided into 32 sections. A table correlates each of the sections with corresponding portions of each of 13 widely-used general or introductory psychology textbooks. No technical apparatus is needed, for the manual furnishes much of the material in printed form. In addition to instructions and spaces for reports and conclusions, many experiments contain extended comments and references.—*H. Schlosberg* (Brown).

6015. **Simpson, G. G., & Roe, A. Quantitative zoology. Numerical concepts and methods in the study of recent and fossil animals.** New York: McGraw-Hill, 1939. Pp. 414. $4.00.—A book of statistical methods for zoologists. "Much attention is paid to dynamic problems, such as those of contingency, regression, and growth." The contents are as follows: (1) types and properties of numerical data; (2) mensuration; (3) frequency distributions and grouping; (4) patterns of frequency distributions; (5) measures of central tendency; (6) measures of dispersion and variability; (7) the normal curve; (8) probability and reliability; (9) sampling; (10) comparisons of samples; (11) small samples and single specimens; (12) correlation; (13) regression; (14) association; (15) graphic methods; (16) growth; appendix; calculation; symbols; formulas; glossary. —*R. M. Gagné* (Brown).

6016. **Stanley, J. A device for administering impact stimuli to experimental animals.** *J. comp. Psychol.*, 1939, **28**, 93–96.—An apparatus is described which enables the experimenter to give the animal a sharp tap, the energy being measurable and constant at a given setting.—*N. L. Munn* (Vanderbilt).

6017. **Stevens, B. The psychology of physics.** London: Sherratt & Hughes, 1939. Pp. 282+xvi. 7/6.—The author makes three postulates from which physical laws are deduced. Inertia, time, and space are three subjective aspects used for the theoretical classification of objective nature, and are distinguished from each other by having sets of one, two, and three measures. Together with the identity and objective postulates, and the introduction of definitions in the course of the reasoning, these provide a foundation from which are deduced theories conforming with observation and experiment. The development indicates that the main axiomatic supports of modern physics, such as the mass-velocity law, the Doppler-effect theory, general and special relativity, the photon theory, etc., are fallacious. However, perceptual equivalents for the fallacious theories account for the corresponding phenomena; and rather than detached theories, as with the axiomatic approach, all the theories and concepts are combined into one system.—*N. R. Bartlett* (Brown).

6018. **Stocks, J. L. Reason and intuition.** [Ed. by Dorothy M. Emmet.] New York: Oxford Univ. Press, 1939. Pp. 281. $4.00.

6019. **Strong, C. A. The sensori-motor theory of awareness.** *J. Phil.*, 1939, **36**, 393–405.—A reply to Montague's criticism of the author's book *A Creed for Sceptics*. Brain process is both physical and psychical. But there is not always consciousness where there is energy. In inanimate objects there is sentience, out of which consciousness can be evolved. Sentience involves no subject-object relation; it is not cognitive, but purely affective; it is unorganized. Awareness is a function which sentience acquires when it is organized in the brain. There is a motor as well as a sensory component in all awareness. As in vision there are muscular adjustments of the eyes, so in the other senses also the organism responds to a sensation, and refers the sensation to the object as its cause. The sensation, though not itself aware, makes the organism aware because it has been brought to bear upon the object by the reaction of the sense organs. Awareness is thus a function conferred on the sensation by the reaction. If consciousness is not to arise miraculously, there must be something in the sleeping body which permits the return of consciousness on awaking; this is sentience. It is like the individual's nature with all organization removed.—*J. G. Miller* (Harvard).

6020. **Treloar, A. E. Elements of statistical reasoning.** New York: Wiley, 1939. Pp. xi+261. $3.25.—Not a "compendium of statistical techniques"—small-sample techniques are omitted entirely—this text is intended to develop "an aptitude for logical analysis in quantitative thinking." The argument is divided into 16 chapters: numerical description, the law of frequency distribution, typical values, the measurement of variation, moments and distribution characteristics, the normal curve, bivariate distribution and the coefficient of correlation, rectilinear regression, residual variation, errors of random sampling, sampling errors of the correlation coefficient, proportions and probability, the proportions of vital statistics, sampling errors of proportions, the measurement of frequency discordance, independence, and bivariate tables of frequency. Appended are: a table of normal curve functions, tables of z_r as a function of r, a graph of probability levels for r when ρ is zero and N is small, a table of the probability integral of χ^2, and a list of selected formulas.—*J. McV. Hunt* (Brown).

6021. **Tryon, R. C. Improved cluster-orthometrics.** *Psychol. Bull.*, 1939, **36**, 529.—Abstract.

6022. **Tschermak-Seysenegg, A. Über Parallaktoskopie.** (The observation of parallax.) *Pflüg. Arch. ges. Physiol.*, 1939, **241**, 455–469.—Apparatus is described.—(*Biol. Abstr.* XIII: 9471).

6023. **[Various.] Students' dissertations in sociology.** *Amer. J. Sociol.*, 1939, **45**, 86–102.—The list includes such subjects as the following: adjustment of behavior-problem boys, an analysis of the statistical factors underlying certain techniques for validating personal and social adjustment tests, a comparative study of the social and psychological characteristics of women college students in home economics, education and liberal arts, social attitudes of adolescent girls on relief, an empirical revaluation of Sr. Loretta Marie Sheey's personality inventory in terms of introversion and extraversion, relation of borderline mental states to delinquency, a mental-hygiene survey of one thousand high school students, the construction of a standardized test to measure achievement of students in sociology, certain effects of economic depression on juvenile delinquency, some social-psychological factors in differential fertility, the relation of neurotic tendencies to adjustment in engagement.—*D. L. Glick* (Brown).

6024. **Weiss, M. G., & Cox, G. N. Balanced incomplete block and lattice square designs for testing yield differences among large numbers of soybean varieties.** *Res. Bull. Ia. agric. Exp. Sta.*, 1939, No. 257, 293–316.—The authors present the statistical features of a balanced incomplete block design and a lattice square arrangement for determining the differences between items in a variable medium. The purpose of the designs is to minimize the number of test samples and the number of items within a sample. These techniques are suited only to testing small differences between items. Partial confounding of item differences with block effects in the one case, and with column and row effects in the other, renders the designs unsuited to measuring differences over a wide range.—*N. R. Bartlett* (Brown).

6025. **Wilson, E. B., & Worcester, J. Team tests for generals and specifics.** *Proc. Nat. Acad. Sci., Wash.*, 1939, **25**, 358–364.—6 tests can be resolved into 3 general and 6 specific factors in two different ways. Two solutions for a single set of data are presented as illustrations, and the implications of this fact for the naming of the factors are discussed. —*D. E. Smith* (Alberta).

6026. **Zilboorg, G. Eugen Bleuler, 1857–1939.** *Psychoanal. Quart.*, 1939, **8**, 382–384.—Tribute is paid to Bleuler for his contributions to psychiatry, and the special significance and permanence of his work on schizophrenia, despite his belief in its organic nature, is particularly emphasized.—*M. H. Erickson* (Eloise Hospital).

[See also abstracts 6062, 6085, 6170, 6205, 6244, 6333.]

NERVOUS SYSTEM

6027. **Barcroft, J., & Barron, D. H. The development of behavior in foetal sheep.** *J. comp. Neurol.*, 1939, **70**, 477–502.—In this study photographic recordings of spontaneous and sensorially aroused movements in foetal sheep were made. First responses to peripheral stimulation are restricted in the amount of musculature involved. As development proceeds, the extent of responses aroused by stimulation of nerves in the head region increases to a much greater degree than for nerves of the trunk.

Some of the latter never attain the ability to arouse total responses, as do those of the head and neck regions. The study does not definitely establish the times at which the first local responses of the trunk can be aroused, but wherever local and extensive responses appear together the latter seem to be dominant over the former. Throughout the study behavioral observations are correlated with the development of long and short neural tracts.—*C. P. Stone* (Stanford).

6028. **Biel, W. C., & O'Kelly, L. I. The effects of cortical lesions on emotional and regressive behavior in the rat.** *Psychol. Bull.*, 1939, **36**, 510.—Abstract.

6029. **Bromer, J. A. Thalamic mediation in the monkey of affective responses capable of being conditioned.** *Psychol. Bull.*, 1939, **36**, 576.—Abstract.

6030. **Crescitelli, F., & Jahn, T. L. The effect of temperature on the electrical response of the grasshopper eye.** *J. cell. comp. Physiol.*, 1939, **14**, 13–27.—At 0° C. the magnitude, rate of development, and decline of the response are decreased and the latent period lengthened; the effects are completely reversible. The magnitude of response varies with temperature, and different animals have different optima. At higher temperatures a rhythmic after-discharge may appear. Temperatures up to 56° C. were studied. Synchronization in ganglionic elements is considered in interpreting the discharge.—*O. W. Richards* (Spencer Lens Company).

6031. **Ericksen, S. C. A second study on the relative effect of a cerebral lesion upon learning, retention, and transfer.** *J. comp. Psychol.*, 1939, **28**, 45–53.—This repetition of a former experiment verifies the author's previous finding that the effect of a lesion approximately constant in size and location varies "directly with the difficulty of the problem and inversely with the ability of the animals." Continued training decreases the difference between operated and normal animals. Progressive selection of better learners in the operated group and greater susceptibility of normal animals to "proactive inhibition" may account for this finding. Comparison of error elimination by the operated and normal rats indicates that the operation interferes with ability to "inhibit the 'anticipatory' response combined with a tendency by the operated-failures to make more errors in the direction of the food box." Normal rats are "more susceptible to the conditions of negative transfer, especially in the first part of the maze."—*N. L. Munn* (Vanderbilt).

6032. **Gyergyay, A. v. Empfindlichkeit, Betaübung, und Innervation des Nasenrachenraumes.** (Sensitivity, anesthetization, and innervation of the nasopharyngeal area.) *Acta oto-laryngol., Stockh.*, 1939, **27**, 519–527.—The author made anatomic dissections to determine more accurately the innervations of the nasopharynx as an aid in the production of good local anesthesia of this region. In his anesthetization procedure he injects the novocain solution at the site of the motor nerve of the levator palatina (*Gaumenheber*), the ganglion with the plexus epipharyngeus, and a certain fine brush-like structure which requires further study. Because of this procedure the whole nasopharyngeal space becomes anesthetic, but not the throat (*Mundrachen*). It seems worth while to report the hitherto unnoted finding that the pharynx (*Rachen*) is divided into segments just as is the esophagus, and that the nasopharynx constitutes the uppermost segment of the pharynx.—*E. M. Pilpel* (New York City).

6033. **Halstead, W. C. Category behavior and frontal lobe lesions in man.** *Psychol. Bull.*, 1939, **36**, 511.—Abstract.

6034. **Knott, J. R., & Gibbs, F. A. A Fourier analysis of the electroencephalogram from one to eighteen years.** *Psychol. Bull.*, 1939, **36**, 512–513.—Abstract.

6035. **Lindsley, D. B. Bilateral differences in brain potentials from the two hemispheres in relation to laterality and stuttering.** *Psychol. Bull.*, 1939, **36**, 512.—Abstract.

6036. **Lindsley, D. B., & Bradley, C. Electroencephalography as an aid to understanding certain behavior disorders of childhood.** *Z. Kinderpsychiat.*, 1939, **6**, 33–37.—"Case reports of five behavior problem children . . . in which the electroencephalogram proved of value in establishing or confirming the diagnosis. In each of these cases abnormality of the electrical activity of the brain suggested an underlying disturbance of the central nervous system as a basis for the behavior disorders which the children showed."—*D. Shakow* (Worcester State Hospital).

6037. **Macht, D. I. Comparative effect of cobra venom and morphine on some psychological reactions.** *Med. Pr.*, 1939, **201**, No. 5209. Pp. 12.—Clinical studies and laboratory experiments upon subjects who have been injected with moderate doses (5–10 mouse units) of a sterile solution of cobra venom have led to the following conclusions: "(1) Cobra venom relieves pain, not through a peripheral action on sensory nerve endings or ascending nerve tracts, but through its effect on the central nervous system, more particularly the brain. (2) This analgesic action on the brain, however, is not identical with that produced by morphine, for which it may sometimes be substituted clinically, because the higher or intellectual faculties are not depressed by cobra venom as they are by opium alkaloids and, to a lesser extent, by other analgesics. (3) The modus operandi for cobra venom would therefore seem to be an action on some lower synapses, probably in the optical thalamus. (4) Cobra venom seems to be less depressant for neuromuscular performance than morphine and other opiates. (5) Unlike both narcotics and antipyretics, cobra venom actually widens the field of vision, particularly for green and red, whereas opiates and other analgesics narrow it. (6) In contrast to opium alkaloids and other analgesics, cobra venom, instead of depressing, was actually found to stimulate intellectual performance in mental efficiency tests on normal individuals."—*R. M. Gagné* (Brown).

6038. **Marshall, W. Psychiatric evaluation of afferent stimuli and learning processes.** *Psychiat. Quart.*, 1939, **13**, 322–329.—The physiology of afferent nervous activity is described, with special attention to the nature of the cortical changes resulting. The significance of cortical potentials as found by the electro-encephalogram is discussed, and implications for learning and psychopathology are noted.—*R. C. Moore* (Boston Psychopathic Hospital).

6039. **Ping, C. On some points concerning the functions of the mammalian cerebral cortex.** *Contr. biol. Lab. Sci. Soc. China*, 1937, **12**, 107–128.—This paper gives a review of most of the important works on the motor and sensory areas and higher centers of the cerebral cortex of the mammalian class, tracing the functional development from Monotremata to Primates.—(*Biol. Abstr.* XIII: 11141).

6040. **Ping, C. On the distribution of the motor centers on the normal and partly decorticated cerebrum of the rabbit.** *Contr. biol. Lab. Sci. Soc. China*, 1939, **13**, 43–55.—(*Biol. Abstr.* XIII: 11142).

6041. **Pumphrey, R. J. The double innervation of muscles in the clam (Mya arenaria).** *J. exp. Biol.*, 1938, **15**, 500–505.—This paper describes electrically recorded experiments concerned with the double innervation of muscles in the clam. Two of the somatic muscles (the anterior adductor and the retractor muscle of the mantle) were found to receive a double motor innervation. The activity of one group of motor fibers, which yield action potentials of relatively great magnitude, is necessary to excite the muscle to complete and rapid contraction. The principal function of the second group, which yields relatively small action potentials, is to delay the relaxation of the muscle. 9 references.—*C. K. Trueblood* (Harvard).

6042. **Scheidt, W. Aufbau einer neurologischen Psychologie.** (Framework of a neurological psychology.) Jena: Fischer, 1938. Pp. 192. RM 8.

6043. **Smith, K. U. The role of the superior colliculi in the mediation of optic nystagmus.** *Psychol. Bull.*, 1939, **36**, 510–511.—Abstract.

6044. **Weston, J. K. Observations on the comparative anatomy of the VIIIth nerve complex.** *Acta oto-laryngol., Stockh.*, 1939, **27**, 457–497.—Measurements of the sensory areas of the inner ear are reported and compared for various vertebrates, including bat, cat, snake, bird, fish, and man. It was found that: (1) the ratio of the area of the upper sensory part to that of the lower sensory part of the inner ear was almost commonly 5:5 or 6:4; (2) when areas of the canal type are compared with areas of the macular type, one finds ratios of 7:3 and 2:8, which appear to be related to the equilibratory demands made upon the organism; (3) when areas of the cochlear type are compared with areas of the saccular type, the tailless amphibians exhibit a surprisingly high value for the former. Consideration of the ganglion cells of the 8th nerve illustrate that "they are in part intracranial and in part intraotic in position among all the vertebrates examined." On the basis of the condition in *Sphenodon*, it was observed that: (1) the ganglion cells related to the papilla basilaris and the macula lagenae sent their neuraxes into the most dorsal portion of the medulla, apparently into the area cochlearis: (2) these were followed in order, from dorsal to ventral, by the fibers coming from the macular sacculi ganglion cells . . . those from the crista posterior ganglion cells, etc.—*E. M. Pilpel* (New York City).

[See also abstracts 5985, 5998, 6089, 6104, 6118, 6173, 6182, 6187, 6198, 6205, 6209, 6269, 6535.]

RECEPTIVE AND PERCEPTUAL PROCESSES

6045. **Atwell, S. Color vision in relation to artistic ability.** *J. Psychol.*, 1939, **8**, 53–56.—In order to discover whether any trend substantiating Adler's doctrine that artistic ability may arise from an inferior organ appeared in the third to sixth grades, the relation between color weakness and ratings on artistic ability was studied for these grades. Color weakness was tested with the color recognition section of the Los Angeles art test, by H. S. Lewerenz; a rating on general artistic ability for each child had been previously obtained from the respective teachers. The data revealed that, for the scholastic levels tested, the Adlerian doctrine does not hold; on the contrary, a slight positive relationship was found between color vision and artistic ability.—*J. McV. Hunt* (Brown).

6046. **Beck, L. F. Stereoscopic vision in preschool children.** *Psychol. Bull.*, 1939, **36**, 560.—Abstract.

6047. **Bielschowsky, A. Lectures on motor anomalies. XII. Ocular spasms.** *Amer. J. Ophthal.*, 1939, **22**, 856–861.—A discussion of the clinical manifestations of ocular spasm, with special consideration of hysterical paralyses. Although a hysterical etiology of paralyses of the ocular muscles is frequently questioned, the author believes that such paralyses may occur.—*D. J. Shaad* (Institute of Ophthalmology, New York City).

6048. **Bogoslovski, A. I. Fusion of flickers of light induced by electrical stimulation of the eye.** *Bull. Biol. Méd. exp., U. R. S. S.*, 1937, **3**, 303–306.—Research on 4 subjects. When the frequency of stimulation is held constant, the phosphenes increase in brightness with the intensity of the current; when the frequency is increased, brightness decreases. Indeed, for a very high frequency, the phosphene disappears completely. One may not, then, speak of fusion. This critical frequency for disappearance decreases with dark adaptation and increases with light adaptation. It increases markedly under the influence of a facilitating auditory stimulus or of illumination of the other eye. There is a parallelism between the variations of the absolute sensitivity of the eye and those of the critical frequency for disappearance. Finally, this frequency varies regularly with the intensity of the

current: the duration of the interruption of stimulation corresponding to the critical frequency decreases hyperbolically as a function of the intensity of the current.—*W. S. Verplanck, Jr.* (Brown).

6049. **Bouman, H. D. On the development of the tonal sensation.** *Arch. néerl. Physiol.*, 1939, **24**, 142–152.—Experimenting with sound stimuli the wave form of which is far removed from the simple harmonic form, the author found that the timbre of the sound perceived was almost completely independent of the wave form. With condenser discharges, strength-duration curves were obtained which were independent of frequency. This latter result, taken with experiments on summation of short tones, supports the hypothesis that the central nervous system, as well as the inner ear, plays an important role in the determination of pitch. It is believed that the latter hypothesis offers a ready explanation for some experimental contradictions in the field of audition.—*C. P. Stone* (Stanford).

6050. **Bourdon, B. Un cas de différence de perception entre les deux yeux.** (A case of difference of perception between the two eyes.) *Bull. Soc. sci. Bretagne*, 1937, **14**, 202–205.—By alternately illuminating the right and the left eye with a uniform field, the author has discovered that at rates of alternation of 2 per second there occurs an illusory movement of a faint light which seems to sway from left to right and back again. At slower rates the faint light appears alternately at right and left. As it is not possible to distinguish between the sensations arising in each eye, the author has investigated the mechanism active in determining this localization. A dissymmetry occurs in the perceived field: Under conditions of brief stimulation of the dark-adapted immobile eye, one sees to the right, if the right eye is stimulated, a bright stripe encircling a dark patch, which may be identified as the blind spot. The same phenomenon occurs, but to the left, if the left eye is stimulated. This relatively greater intensity from a small region of the retina effects the impression of localization.—(Courtesy *Année psychol.*)

6051. **Brunswik, E. Perceptual characteristics of schematized human figures.** *Psychol. Bull.*, 1939, **36**, 553.—Abstract.

6052. **Colenbrander, M. C. Über den Drehpunkt des Auges.** (On the center of rotation of the eye.) *Arch. Augenheilk.*, 1936, **109**, 622–628.—The line of regard was determined in three planes, the vertical, the horizontal, and one oblique plane. There is given, for one subject, the projection of all the lines of sight in two planes, the horizontal and the vertical (antero-posterior). These cross in a region 1.3 mm. high and 0.9 mm. wide. Practically, then, it is possible to speak of a center of rotation of the eye.—(Courtesy *Année psychol.*)

6053. **Colenbrander, M. C. Schema für Augenbewegungen.** (A schema for eye movements.) *Arch. Augenheilk.*, 1936, **109**, 629–636.—Wishing to furnish the practitioner with extensive data on the relative action of the various eye muscles in the displacements of the line of regard, the author has eliminated formulae requiring extensive calculations. He begins by presenting coordinates defining the position of the different eye muscles with reference to the three axes of the eye, and then applies Listing's law. The numerical results are followed by schemata representing the effect of each muscle in eye movements from the center to positions 15°, 30°, and 45° peripherally in each plane.—(Courtesy *Année psychol.*)

6054. **Collins, M. Tests in common use for the diagnosis of colour defect.** *Nature, Lond.*, 1937, **140**, 532–534; 569–570.—The author discusses the problem of color blindness and its importance. Most particularly, the various anomalies of color vision, which form a graded series of deficiency from normal color vision to Daltonism, are emphasized. There is a discussion of the various tests employed in the detection of color blindness, and, in the case of the Ishihara test, the author presents data on the relative frequency of normal-type and of achromatopsic-type answers given by a population including normals, the color-weak, and the color-blind, for each plate. The data indicate that Ishihara's figure 6 is the most discriminating test.—*W. S. Verplanck, Jr.* (Brown).

6055. **Crawford, B. H. The change of visual sensitivity with time.** *Proc. roy. Soc.*, 1937, **B123**, 69–89.—This is a report of research on the threshold of visibility of a luminous spot transitorily projected at regular intervals on a field 45° in diameter and of a fixed brightness level. Tests of the decrease in the threshold as a function of time were made in two cases, the first involving the complete elimination of the field brightness, and the second a definite diminution of field brightness. Differential thresholds were determined. The author presents his results in graphic form only; they show that the decrease in the threshold is marked by discontinuities in the course of time. The general conclusion is that the course of adaptation is not modified when the original level is the same.—*W. S. Verplanck, Jr.* (Brown).

6056. **Crawford, B. H. The luminous efficiency of light entering the eye pupil at different points and its relation to brightness threshold measurements.** *Proc. roy. Soc.*, 1937, **B124**, 81–96.—The author continues his series of investigations, employing a new method, based on the determination of thresholds (absolute in the case of dark surrounds, relative in the case of bright surrounds). The results here obtained confirm those previously published, and show the efficiency (ϵ) to be a function of the deviation from the center of the pupil of the point at which a given bundle of rays enter the eye. Surround brightness is not effective for the foveal region, but modifies ϵ when the region stimulated is peripheral. Efficiency tends to be homogenous at low intensities of light, and it is only when the intensity is very high that the distribution of efficiency, with its characteristic central maximum, becomes clear. The interpretation given these facts is that in the dark-adapted state the pigment of the

rods of the retina is distributed throughout the rods, whereas in the light-adapted state it is massed at one end of them. Hence in the dark-adapted state light obliquely incident on the rods is more effective than light normal to the retina.—*W. S. Verplanck, Jr.* (Brown).

6057. **Crittenden, E. C. Terminology and standards of illumination.** *J. opt. Soc. Amer.*, 1939, **29,** 103–107.—The present status of terminology and standards is summarized.—*R. J. Beitel, Jr.* (American Optical Company).

6058. **Dispensa, J. Differences in visual acuity.** *J. Psychol.*, 1939, **8,** 157–163.—In a survey of over 4000 public-school students, using the Project-O-Chart (which has a constant source of illumination) as a measuring device, the following differences in visual acuity of the unaided eye were found: (1) Differences associated with sex ($N = 1891$ pairs); females had more defects than males. (2) Differences associated with race ($N = 807$ pairs); whites had more defects than Mexicans. (3) Differences associated with school level ($N = 470$ pairs); students in higher schools had more defects than students of the same age in lower schools. In a more limited study, no significant differences were found between elementary school students with normal and those with defective visual acuity, in the following respects: (1) intelligence, as measured by the Kuhlmann-Anderson intelligence test ($N = 74$ pairs); (2) reading ability, as measured by the Los Angeles elementary reading test ($N = 48$ pairs); (3) grade placement.—*J. McV. Hunt* (Brown).

6059. **Gilbert, G. M. Dynamic psychophysics and the phi phenomenon.** *Arch. Psychol., N. Y.*, 1939, No. 237. Pp. 43.—On the basis of quantitative data the following examples of dynamic variability were illustrated in the case of the phi phenomenon: (1) momentary and periodic fluctuations of the function, due presumably to normal fluctuations of organic processes as well as of mental set; (2) progressive changes, such as adaptation, practice, and fatigue effects, depending on the recency and frequency of previous stimulation; (3) ambiguity of perceptual organization under certain conditions; (4) perseverative and anticipatory set, and other illustrations of the general factor of mental set, which may depend on the type and level of immediately preceding or concurrent stimulation, past experience, suggestion, or other motivation; (5) intersensory inhibition and facilitation, depending on the attributes of the heteromodal stimuli as well as intersensory configuration.—*E. M. Achilles* (Columbia).

6060. **Gilmer, B. v. H. A possible receptor of cutaneous pressure and vibration.** *Psychol. Bull.*, 1939, **36,** 558.—Abstract.

6061. **Goldmann, H. Zum Problem der Nyctalopie.** (On the problem of nyctalopia.) *Schweiz. med. Wschr.*, 1936, **66,** 1127–1129.—An account of an abrupt attack of blindness caused by vascular spasm followed by recovery. This recovery was not complete; there remained a peculiar defect of vision. Increase in brightness was accompanied, paradoxically, by a considerable diminution of acuity. At 15 lux acuity reached the value of 0.9, whereas it was lowered to 0.06 at 1000 lux. The author offers the following explanation of this effect: under strong illumination the contrast of black on white is suppressed by reason of the fact that the maximal frequency of impulses in the optic nerve is decreased by an increase in the refractory period of the nerve fibers. Thus the maximal action of the contrast effect is reached for black surfaces which are strongly illuminated.—(Courtesy *Année psychol.*)

6062. **Goodfellow, L. D. The importance of impedance-matching in studies of vibro-tactile sensitivity.** *Psychol. Bull.*, 1939, **36,** 558.—Abstract.

6063. **Gordon, B. L. Oculists and occultists. Demonology and the eye.** *Arch. Ophthal., Chicago,* 1939, **22,** 25–65.—The notions of demonology and the rituals associated with "eviction of the demons" indicate that the influence of suggestion was an important factor in the cures. A few cases are summarized in which the modern application of suggestion has been similarly successful.—*M. R. Stoll* (Ohio State).

6064. **Grether, W. F. Color vision and color blindness in monkeys.** *Comp. Psychol. Monogr.*, 1939, **15,** No. 4. Pp. 38.—Spectral colors were projected upon food boxes by means of two previously described monochromators. New World and Old World monkeys were trained to associate a food reward with certain spectral stimuli. Human subjects were also tested under somewhat comparable conditions. Old World monkeys and human subjects did not differ significantly in wave-length discrimination. New World cebus monkeys appeared to be deficient in the red and yellow regions. A New World spider monkey showed as good discrimination as did the human and Old World subjects. Monkeys required from 32 to 270% more red than did human subjects in matching a complementary mixture with white. Visibility curves derived from absolute brightness limens showed no differences in the spectral sensitivity of monkeys and men. This result is regarded as questionable as a comparison of sensitivity at high brightness levels. Tests for dichromatic vision suggest that cebus monkeys have a neutral band in the spectrum at from 510 to 520 mμ. When the data for color mixture in cebus monkeys are compared with those for human dichromats, there is a suggestion that the color blindness of the monkeys conforms to human protanopia. Extensive bibliography.—*N. L. Munn* (Vanderbilt).

6065. **Henry, F. The attribute of damping in auditory discrimination.** *Psychol. Bull.*, 1939, **36,** 561.—Abstract.

6066. **Koch, F. L., & Avery, deH. P. Marked anisometropia. Report of a case in which full correction was accepted.** *Arch. Ophthal., Chicago,* 1939, **21,** 987–989.—Report of a patient with facial asymmetry and conic corneae without any pathology who accepted the following correction: O.D., −19.25

cyl. axis 90; O.S., −3.50 sph.+10.50 cyl. axis 5. Binocular vision was markedly superior to monocular; second degree fusion but not stereopsis was demonstrated. Apparently no determinations of image size were attempted.—*M. R. Stoll* (Ohio State).

6067. **Kravkov, S. V. Effect of indirect light stimulation as a function of the intensity of a direct stimulus.** *Acta ophthal., Kbh.*, 1937, **15**, 96–103.—A study of the differential sensitivity of the eye at various brightness levels during the general stimulation (at 11,000 lux) of the contralateral eye, and in the absence of such stimulation. For brightnesses of relative values 0.8, 3.7, 20, and 45 (according to the illumination in lux of the stimulating area), the ratio of sensitivities was found to be 0.85, 0.78, 0.73, 0.75. The effect, then, would seem to increase with brightness at first and later to become constant.—(Courtesy *Année psychol.*)

6068. **Kravkov, S. V. The influence of acoustic stimulation upon the colour-sensibility of a protanopic eye.** *Acta ophthal., Kbh.*, 1937, **15**, 337–342.—The chromatic visual threshold of a dark-adapted protanopic eye was determined before, during, and after strong auditory stimulation (diotic stimulation with a tone of 780 c.p.s.). There was no effect on the thresholds for the longer wave lengths, a finding to be contrasted with those from similar measurements on normals. According to the author the modification is restricted to the fundamental blue in protanopes. These facts appear to him to indicate that there is a coincidence between the excitability curves of the fundamental red and green, for in normals such auditory stimulation increases sensitivity to green and depresses sensitivity to red. In the protanopic eye these antagonistic effects are nullified by the coincidence of sensitivity.—(Courtesy *Année psychol.*)

6069. **Langfeld, H. S. The dynamic quality of perception.** *Psychol. Bull.*, 1939, **36**, 553.—Abstract.

6070. **Lewis, D. Pitch and frequency modulation.** *Psychol. Bull.*, 1939, **36**, 560–561.—Abstract.

6071. **Lindberg, B. J. Experimental studies of color and non-color attitude in school children and adults.** Copenhagen: Levin & Munksgaard, 1938. Pp. 170.—An attempt to discover the relationship between bodily type and the ability to direct the attention to colored or colorless stimuli, with correlations for age, intelligence, and sex.—*R. C. Givler* (Tufts).

6072. **Lyle, D. J. Arrests in embryologic development as factors in vision. Brief reviews of the embryology of the eye with associated anomalies of arrested development.** *Arch. Ophthal., Chicago*, 1939, **21**, 1037–1054.—*M. R. Stoll* (Ohio State).

6073. **Maré, G. de. Audiometrische Untersuchungen über das Verhalten des normalen und schwerhörigen Ohres bei funktioneller Belastung, nebst Bemerkungen zur Theorie des Gehörs.** (Audiometric studies of the behavior of the normal and the partially deaf ear under functional loading, with remarks on the theory of hearing.) *Acta oto-laryng., Stockh.*, 1939, Suppl. **31**. Pp. 173.—The goal of the study was the investigation of the reaction of the normal and the partially deaf ear to stimulation by tones louder than a continuous threshold tone. Specifically, "covering effect" and "adaptive reaction" were studied in cases of both perceptual and conductive hardness of hearing. The author holds that the "covering effect" (*Verdeckungseffekt*) as such does not explain why hearing (of speech) in noise is more difficult when the auditory defect is perceptual than when it is one of conduction. Significance does attach in this connection, however, to the diminution caused by the interfering tone or noise stimulus in the power to discriminate between neighboring frequencies. This explanation, on the basis of the results obtained, applies only when the noise is in the same frequency range as the speech. The fact that the curves for stimulation of the basilar membrane are quite different for the nerve cases than for the "conduction" cases may be a contributory influence.—*E. M. Pilpel* (New York City).

6074. **Marro, M. Esperienze relative alla persistenza della sensazione uditiva.** (Experiments on the persistence of auditory sensations.) *Arch. ital. Psicol.*, 1938, **16**, 117–124.—An apparatus was constructed to interrupt rhythmically the electric current of a circuit through which speech was transmitted. When these interruptions followed each other rapidly, sounds emitted during two successive intervals tended to blend, which facilitated the illusion of the continuity of auditory perception. On the other hand, the frequency of the interruptions was limited by the fact that sufficient time had to be allowed for the perception of several frequencies forming part of the sound. The timbre of the human voice was not altered sufficiently by 35 to 50 interruptions per second to destroy the illusion of continuity. Especially in the case of familiar sound combinations, individual elements were supplemented and connected by subjective integration processes.—*H. Beaumont* (Kentucky).

6075. **Martinelli, L. Sulla luminosità delle immagini, quale appaiono in un cannochiale.** (On the brightness of images as they appear in a telescope.) *Atti. Accad. Lincei*, 1937, **25**, 185.—Increase in the aperture of the diaphragm of the telescope does not give an increase in the brightness of the image as great as would be predicted by the classical laws. The empirical curves observed can be fitted by the following formula:

$$L = \frac{KI\sqrt{Id^2}}{10+0.1p\sqrt{Id^2}}$$

where L is the brightness, I the increase in aperture, d the diameter of the diaphragm of the eye-piece, and p and K constants, of which one depends on the observer.—(Courtesy *Année psychol.*)

6076. **McFarland, R. A., & Forbes, W. H. The effects of low oxygen tension and low blood sugar on dark adaptation.** *Psychol. Bull.*, 1939, **36**, 559–560.—Abstract.

6077. **Metfessel, M. The measurement of bird responses to degrees of intensity of auditory stimulation.** *Psychol. Bull.*, 1939, **36**, 562.—Abstract.

6078. **Moon, P. Basic principles in illumination calculations.** *J. opt. Soc. Amer.*, 1939, **29**, 108–116.—On the grounds that the methods of Lambert are inadequate to present-day illuminating engineering calculations, the author desires to stimulate further advances in the application of field theory to the subject by suggesting an outline of a basic, general light-field theory.—*R. J. Beitel, Jr.* (American Optical Company).

6079. **Muth, J. R., & Griffith, H. D. A study of diet in relation to health. Dark adaptation as an index of vitamin A intake.** *Brit. med. J.*, 1937, September 18, 565–570.—An investigation using Edmond's test cards. These cards are stamped with the letter E, 63 mm. high, width of line 12 mm., gradation of contrast in eight steps, ranging from black on white to a gray whose albedo is less than 1% different from that of its background. The light source yielded 1670 lux, and its intensity was controlled by Tscherning filters. With each filter the minimum contrast permitting the discrimination of the E was determined. With the 120 subjects examined, the time necessary to distinguish the card with maximal contrast when it was used with the most dense filter (reducing the brightness by a factor of 10^{-6}) ranged from 7 to 15 minutes. However, the adaptation curves obtained by the examination of 23 workers' children were distinctly inferior to the normal. These curves could be so modified that they were indistinguishable from the normal by a 2-weeks dietetic treatment of the subjects, involving administration of vitamin A. It may be concluded that abnormality of the dark-adaptation curve may be taken as indicative of a deficiency in the diet of vitamin A.—*W. S. Verplanck, Jr.* (Brown).

6080. **Nagy, M., & Incze, K. Das Verhältnis der Hypovitaminose zur Adaptation.** (The relation of vitamin deficiency to adaptation.) *Arch. Augenheilk.*, 1936, **109**, 567–573.—There has been discovered, by examination of 100 8- or 9-year-old school children, a sharp diminution of dark adaptation in spring as compared with autumn. But the cold season produces a condition of avitaminosis. A comparison of various diets, however, produced no similar differences. This may be attributed to the fact that hypovitaminosis is determined by other factors, such as air, light, and habituation to a certain regimen and diet.—(Courtesy *Année psychol.*)

6081. **Nelson, J. H. The colour-vision characteristics of a trichromat. II.** *Proc. R. phys. Soc., Lond.*, 1937, **49**, 332–337.—The author, employing the Wright colorimeter, has made an extensive study of his own vision. He has determined (1) the values to be allocated to three components (650, 530, and 460 mμ) in order to equate them with various spectral radiations; (2) the distribution in a spectrum of equal energy of perceived brightness; (3) a curve of differential hue discrimination; (4) the values of the wave lengths of complementary radiations, with data on the brightnesses permitting complete nullification of color in complementary mixtures; and (5) the distribution through the spectrum of sensitivity to saturation.—*W. S. Verplanck, Jr.* (Brown).

6082. **Osborn, A. S. Form blindness and proof.** *J. crim. Law Criminol.*, 1939, **30**, 243–249.—"Form blindness," analogous to the more familiar color blindness, may become a disturbing factor in court cases involving disputed handwriting or typewriting, estimation of distances, recognition of persons, etc.—*L. Ackerson* (Illinois Institute for Juvenile Research).

6083. **Révész, G. Plastica dei ciechi.** (The plastic sense of the blind.) *Arch. ital. Psicol.*, 1938, **16**, 77–94.—The author's investigation of the plastic sense of blind persons seems to imply that no esthetic experiences can occur in those blind from birth. Tactual exploration results in structural analysis rather than form perception. However, specially gifted people who were blinded relatively late in life may experience esthetic enjoyment in this fashion and even produce works of art (e.g., the Italian sculptor Masuelli). The explanation is to be found in the co-ordination of their visual and tactual experiences, which was established before they lost their sight.—*H. Beaumont* (Kentucky).

6084. **Roelofs, C. O. Die optische Lokalisation.** (Visual localization.) *Arch. Augenheilk.*, 1935, **109**, 395–415.—The author rejects previously presented theories of spatial localization. According to him, illusory spatial experiences and the results of his own experiments are compatible only with the hypothesis of a sensation of innervation. By this theory, the localization of a fixated point is effected by motor impulses set up by the point; so too for non-fixated points, even though they do not attract the attention. Two experiments are reported which give evidence for such a "motorischer Impuls" without motor response (the response is inhibited by that of the central point, i.e., the fixated point). Optic localization is still more complex. It is also dependent upon the impulses which govern the convergence of the eyes, head position, etc. Retinal disparity is effective in depth localization only if it is slight enough to set up the correct convergence responses.—(Courtesy *Année psychol.*)

6085. **Sloan, L. L. Instruments and technics for the clinical testing of light sense: I. Review of the recent literature.** *Arch. Ophthal., Chicago*, 1939, **21**, 913–934.—A detailed résumé of the literature on light sense which has appeared since Adams' review in 1929 is followed by a summary indicating the difficulties and differences in technic which have contributed to the occasionally discordant and frequently incomparable results, and suggesting the desirability of various complementary studies.—*M. R. Stoll* (Ohio State).

6086. **Stromberg, E. L. The relationship of single binocular perception to the stimulation of retinal corresponding points.** *Psychol. Bull.*, 1939, **36**, 526.—Abstract.

6087. **Sumner, F. B. Human psychology and some things that fishes do.** *Sci. Mon., N. Y.*, 1939, **49**, 245–255.—The quantitative relations between sensory stimuli and the physiological responses of fishes (color changes and temperature adaptation) seem to be closely similar to those known to hold between these same stimuli and our own perceptions of them. The correspondence in these cases is sufficiently striking to suggest that it depends upon essential similarities in the reactions of living matter in general.—*O. P. Lester* (Buffalo).

6088. **Town, A. E. Contact glasses for correction of refractive errors in monocular aphakia. Production of binocular single vision.** *Arch. Ophthal., Chicago*, 1939, **21**, 1021–1026.—When a contact glass is substituted for the usual type of aphakic correction, image size difference is reduced from about 30% to 4% and binocular single vision can be successfully maintained.—*M. R. Stoll* (Ohio State).

6089. **Traquáir, H. M. The field of vision and the anatomy of the visual nerve path.** *Edinb. med. J.*, 1939, **46**, Feb., 83–94.—A review of the anatomic structure of the visual pathway and its relation to visual field defects caused by lesions.—*D. J. Shaad* (Institute of Ophthalmology, New York City).

6090. **Ulrich, K. Eine Taubstummenfamilie aus der ersten Hälfte des XVIII. Jahrhunderts und ihre Descendenz.** (A family of deaf mutes from the first half of the 18th century and their descendants.) *Acta oto-laryngol., Stockh.*, 1939, **27**, 505–508.—The study illustrates the recessive character of congenital deafness. The family studied, which came from near Zürich, showed 6 congenital deaf mutes in 2 successive generations, descended from a hearing couple married at the beginning of the 18th century. Investigation of the subsequent generations for 200 years, however, showed that "among all the 390 known descendants not a single other case of deaf-mutism could be discovered. Only in one branch was there even an exaggerated incidence of senile hardness of hearing." It is significant in this connection that there were apparently no marriages among close relatives. Thus no individuals heterozygous for the deaf-mutism married again in the successive generations. A considerable number of branches of the family were above the average socially and culturally. In the older generations the absence of deaf-mutism was judged from the records of their occupations and from their absence from lists of inmates of Zürich asylums for deaf mutes. From the study as a whole Ulrich concludes that deaf-mutism should not be a ground for sterilization.—*E. M. Pilpel* (New York City).

6091. **Wald, G., & Steven, D. An experiment in human vitamin A - deficiency.** *Proc. Nat. Acad. Sci., Wash.*, 1939, **25**, 344–349.—The dark adaptation curve was obtained with one subject under normal conditions (vitamin A saturation) and at various stages of deficiency. The curve relating absolute intensity threshold to the duration of darkness in the normal state shows two plateaus, one related to dark adaptation of the cones, the second to that of the rods. As the subject became night-blind from continued use of a diet deficient only in vitamin A, dark adaptation was slower, and the threshold intensity of both rod and cone plateaus was higher. Administration of carotene caused a return to normal thresholds within two hours. The parallelism in response of rods and cones is discussed.—*D. E. Smith* (Alberta).

6092. **Warren, N. The measurement of visual depth perception.** *Psychol. Bull.*, 1939, **36**, 526.—Abstract.

6093. **Wilcox, W. W. Summation with weak visual stimuli.** *Psychol. Bull.*, 1939, **36**, 559.—Abstract.

6094. **Wright, W. D., & Pitt, F. G. H. The saturation discrimination of two trichromats.** *Proc. R. phys. Soc., Lond.*, 1937, **49**, 329–331.—Data were obtained on the two authors from the point of view of determining the distribution through the spectrum of sensitivity to saturation. Numerical values of the logarithm of the ratio of total brightness (monochromatic light plus white light) to the brightness of the single spectral light corresponding to the threshold of discrimination are presented. The curves obtained are in very satisfactory agreement with previously obtained ones.—*W. S. Verplanck, Jr.* (Brown).

[See also abstracts 5986, 6010, 6019, 6022, 6032, 6037, 6095, 6104, 6108, 6121, 6168, 6175, 6180, 6183, 6195, 6196, 6328, 6422, 6443, 7473, 6534, 6551.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

6095. **Berman, A. Successive reproductions of visually perceived forms.** *Psychol. Bull.*, 1939, 36, 573–574.—Abstract.

6096. **Brown, J. S. A note on a temporal gradient of reinforcement.** *J. exp. Psychol.*, 1939, **25**, 221–227.—32 rats, equally divided as to sex, were placed one at a time in a stabilimeter device capable of registering the strength of a jump-response to shock. A rhythm was set up in these animals by giving them 35 shocks of 0.5 ma. at intervals of 12 seconds. The rats were then tested at the 12-second interval and at intervals shorter and longer, a shock of 0.4 ma. serving as the test stimulus. The findings show that the learned tendency to respond at the 12-second interval spreads to other temporal intervals. The strength of the generalized response increases as the temporal distance from the next point of reinforcement in the series decreases. The strength of the generalized tendency drops sharply after a customary point of reinforcement has been passed, regardless of whether an actual reinforcing stimulus has been presented at that point. Data are also presented which indicate the existence of a second temporal gradient of reinforcement appearing at an interval about double that used in training. The suggestion

is made that the concept of a temporal gradient of reinforcement may be useful in clarifying the results of certain spatio-temporal experiments where spatial factors alone have previously borne the burden of explanation.—*H. W. Karn* (Pittsburgh).

6097. **Brown, W. The positive effect of punishment.** *J. comp. Psychol.*, 1939, **28,** 17–22.—Observing that a single shock experience within a food-box of the Tolman-Honzik maze led rats to abandon a well established habit of taking a shorter route to this box, the writer assumed that "punishment does actually work according to the law of effect." Subsequent reflection, however, aroused the suspicion that "perhaps the mere failure to obtain food in the box in which shock occurred would cause the animal to go to the other food box." The present experiment is a test of this suspicion. When placed in the food box without shock and without food, all of an experimental group acted as did the controls; that is, they continued to use the associated short path. After receiving a shock in the same food box, however, 8 out of the 13 rats took the long path. Of the remaining 5, only 2 appeared undisturbed by the shock. The theoretical significance of these results is discussed at length.—*N. L. Munn* (Vanderbilt).

6098. **Brunswik, E. Probability as a determiner of rat behavior.** *J. exp. Psychol.*, 1939, **25,** 175–197.—"Five groups of 48 rats each were rewarded on the two sides of a choice situation different proportions of times. . . . A training of 24 trials failed to establish a discriminatory response in only one of the groups, for which the chances of reward on the two sides were 2/3 against 1/3 (group '67 : 33'). In contrast to that, groups '100 : 50,' '75 : 25' and '50 : 0' were significantly above the threshold of probability in an increasing order. For the last of these groups, 50 : 0, the difference with control group '100 : 0' which represented the traditional unambiguous type of training dropped below significance ('threshold of certainty'). Discrimination increases with the difference of the probabilities of success on the two sides, a further influence being superimposed due to the ratio of probabilities. . . . Additional experiments of the type 75 : 25 and 100 : 50 introducing special punishment for each non-rewarded choice . . . showed that the increase in discrimination goes with the increase of the ratio of the probability of 'emphasis' as given by punishment or by success, and not with the increase in the ratio of the probability of success, per se."—*H. W. Karn* (Pittsburgh).

6099. **Bunch, M. E. Transfer of training in the mastery of an antagonistic habit after varying intervals of time.** *Psychol. Bull.*, 1939, **36,** 519–520.—Abstract.

6100. **Buxton, C. E., & Grant, D. A. Retroaction and gains in motor learning: II. Sex differences, and a further analysis of gains.** *J. exp. Psychol.*, 1939, **25,** 198–208.—This analysis is based on data used for the preceding paper in the series (*J. exp. Psychol.*, 1939, **25,** 1–17). The sexes were compared as to their performance upon pursuit and other motor learning tests, and as to the differential effects of interpolated periods filled with other motor activities, or with reading, upon retention of skill on the original task. In general, the women present a picture of somewhat greater amounts of change in performance, and susceptibility to changes in experimental routine. Arguments are brought forth to show that recovery from work decrement is but a partial explanation of the gains made in motor learning. The factor of reminiscence is proposed as an added determiner of the gains. A definition of reminiscence is suggested as part of this proposal.—*H. W. Karn* (Pittsburgh).

6101. **Cain, L. F., & Willey, R. deV. The effect of spaced learning on the curve of retention.** *J. exp. Psychol.*, 1939, **25,** 209–214.—59 subjects learned a list of 12 nonsense syllables by massed and distributed practice. Recall was tested following both methods after intervals of one day, three days, and seven days. The anticipation method was used throughout and the final criterion was one correct anticipation of 12 syllables. Results show no significant difference in the number of trials required for mastery under the two conditions of learning. Retention which followed distributed practice was higher and the effect more evident when tested by recall than by relearning. A consideration of the overnight changes shows a progressively increasing recall score with each successive attempt. As the distributed practice groups had opportunity for more attempts at recall, this gave them a distinct advantage over the massed practice groups. It is concluded that practice of recall is important in the explanation of the superiority of distributed over massed practice as obtained under the conditions of the study.—*H. W. Karn* (Pittsburgh).

6102. **Carl, G. P., & Turner, W. D. The effects of benzedrine sulfate (amphetamine sulfate) on performance in a comprehensive psychometric examination.** *J. Psychol.*, 1939, **8,** 165–216.—From a survey of the whole array of data (from 166 subjects) presented it appears that there is a tendency toward retrogression from an initial peak of increased efficiency following dosage of any size, apparently about 2 to 3 hours after ingestion; but that further dosage results in a return to high efficiency and acceleration to a new peak. At or very near the end of the long examination (4 hours) the benzedrine groups showed higher efficiency, and less evidence of fatigue in doing the tasks, than did the lactose group. The authors point out that it should not be supposed that the ingestion of benzedrine is a guarantee of marked change in the *ability* to "think," remember, do manipulative tasks, or function at a markedly increased level of efficiency, either in general or specific ways. It is rather to be supposed that there is a generally favorable reaction in mood, feeling tone, or affective attitude, and that this reaction, in combination with various degrees of stimulation in a physiological sense, favors performance in tasks which call for alertness, persistence, and freedom from fatigue.—*J. McV. Hunt* (Brown).

6103. **Carter, H. D. Predicting a learning ability after varying intervals.** *Psychol. Bull.*, 1939, **36,** 549.—Abstract.

6104. **Cate, J. ten. Bedingte Reflexe auf Lichtreize bei einer Katze nach beiderseitiger Extirpation der Area striata.** (Conditioned reflexes to light stimuli in a cat after bilateral extirpation of the area striata.) *Arch. néerl. Physiol.*, 1939, **24,** 61–67.—Conditioned reflexes to brightness differences can be set up in cats in which there has been bilateral extirpation of the area striata. This research, as well as others on cats and dogs, clearly indicates that the course of conditioning is different for different procedures in presenting the unconditioned and conditioned stimuli.—*C. P. Stone* (Stanford).

6105. **Chandler, C. The relationship between age and tonal patterns in song-isolated roller canaries.** *Psychol. Bull.*, 1939, **36,** 561.—Abstract.

6106. **Conrad, H. S. Sibling resemblance in intelligence, in relation to natal interval.** *Psychol. Bull.*, 1939, **36,** 572.—Abstract.

6107. **Cook, S. W. The judgment of intelligence from photographs.** *J. abnorm. soc. Psychol.*, 1939, **34,** 384–389.—Individuals with considerable experience in judging strangers in a brief period were asked to judge the intelligence of 150 subjects, on the hypothesis that the wide discrepancies in previous studies have been due to their use of a small sample and inexperienced judges. All the judges in this study estimated intelligence with an approximately equal degree of inaccuracy. They were no more accurate in estimating extremes of intelligence than in estimating average or near-average levels. Factors believed to be common to the 10 photographs estimated to be of the highest intelligence and missing from those estimated to be of lowest intelligence, were: symmetry and regularity of features, pleasantness of expression, and neatness of appearance.—*C. H. Johnson* (Portland, Ore.).

6108. **Costa, A. Prima serie di ricerche sull' apprendimento motore nei ciechi.** (A first series of experiments on the motor learning of the blind.) *Arch. ital. Psicol.*, 1938, **16,** 95–116.—Experiments on the ability of two blind boys (one, aged 15, was blinded at 7; the other, aged 13, was born blind) to trace simple geometric designs and verbally describe geometric models indicate that a transfer is possible from tactual to visual spatial experiences. Bibliography of 58 titles.—*H. Beaumont* (Kentucky).

6109. **Daniel, R. S. The distribution of muscular action potentials during maze learning.** *Proc. Ind. Acad. Sci.*, 1939, **48,** 184–185.—Abstract.

6110. **Dick, L. The effect of conditioning upon the original response to the conditioned stimulus.** *Psychol. Bull.*, 1939, **36,** 574.—Abstract.

6111. **Ellis, W. D. Memory for physically identical elements in human maze learning: a transfer problem.** *Psychol. Bull.*, 1939, **36,** 545–546.—Abstract.

6112. **Fürst, B. Use your head!** New York: Funk & Wagnalls, 1939. Pp. ix+289. $3.00.—This book is devoted to experimental work and self-helps for improving the memory, based largely on principles of association. Mnemotechnical systems for remembering names, dates, and numbers are presented. These include numbers up to six digits, and a method for determining the day of the week upon which any given date falls. These aids applied to public speaking show how to use mnemotechnics in constructing and delivering a lecture, and how to prevent stage fright. There is also some discussion of the practical aspects of suggestion and hypnosis.—*M. P. Montgomery* (Faribault, Minn.)

6113. **Golubeva, E. L. [Conditioned reflexes of the newborn guinea-pig.]** *Arkh. biol. Nauk*, 1939, **54,** 132–142.—With a few exceptions it proved possible to work out conditioned motor reactions to acoustic stimuli in all the newborn guinea-pigs tested by the writer. This signifies that the brain cortex of the newborn guinea-pig possesses all the structures necessary for the formation of temporary connections (conditioned reflexes). The different rate of establishment of the conditioned reflex and variations of its stability from one individual to another are due to the difference in the genotypic properties of the nervous system of the newborn animals. The writer succeeded in showing that these typical peculiarities of the nervous system of the newborn guinea-pig are manifested in two forms, viz., one with reduced generalization of excitation and the other with reduced generalization of inhibition. It is possible that such a distinct generalization of either process in the brain of the newborn animal is the rudiment of "mass action" which characterizes the nervous activity of the embryo. During the first days (3–5) after birth the brain cortex of newborn guinea-pigs is able to perform inhibitory functions (extinction and differentiation of inhibition). The peculiarities of these processes, like those of the positive process, consist of their extreme generalization and instability.—*P. Anokhin* (Moscow).

6114. **Greene, E. B. The limits of random and systematic practice effects.** *Psychol. Bull.*, 1939, **36,** 530–531.—Abstract.

6115. **Gulliksen, H. Analysis of learning data using psychologically meaningful parameters.** *Psychol. Bull.*, 1939, **36,** 520.—Abstract.

6116. **Gurnee, H. The effect of mild annoyance upon the learning of visual forms.** *J. exp. Psychol.*, 1939, **25,** 215–220.—"Three groups of human subjects, one control and two experimental groups, were presented a series of twenty nonsense designs. One experimental group received mildly annoying electric shock with the first ten designs, the other experimental group with the last 10 designs. The shock decreased the average number of correct recognitions. The fact does not require explanation in terms of the law of effect as there is some reason to believe the result was a function of distraction rather than annoyance. The findings are contrary to those in which the same degree of shock accompanied right responses in maze situations, and it is suggested that the difference is a result of a different

relation of the shock to the situation. An extension of Thorndike's law of belonging seems to offer the most reasonable explanation."—*H. W. Karn* (Pittsburgh).

6117. **Hanawalt, N. G., & Demarest, I. H. The effect of verbal suggestion upon the reproduction of visually perceived forms.** *J. exp. Psychol.*, 1939, **25**, 159–174.—Evidence from control and experimental groups of subjects is presented which shows that verbal suggestion in the recall period definitely aids in the reproduction of visually perceived forms. The suggestion appears to operate as an aid in several different ways. "In many cases the suggestion enables O to contact the trace of the figure and the learning verbalization. If he remembers the latter vividly he may disregard the suggestion in recall. On the other hand, if the learning association is indefinite, he may depend to a great extent upon the suggestion to fill in the unclear characteristics of the trace. Often the influence of both the learning association and the suggestion in recall is evident. With increased delay in construction, the suggestion in recall operates more and more as a factor in the production of the figure."—*H. W. Karn* (Pittsburgh).

6118. **Harlow, H. F. Formation of conditional responses in the cat and the monkey during inactivation of the motor and of the motor-somesthetic cortex.** *Psychol. Bull.*, 1939, **36**, 576–577.—Abstract.

6119. **Henry, L. K., & Wasson, R. The repetition of classical experiments: I. Starch's distribution of practice.** *J. appl. Psychol.*, 1939, **23**, 503–507.—Under the original conditions, Starch's experiment, performed a number of years ago on the effects of the distribution of practice, was repeated. The general finding that shorter periods are more favorable for learning was confirmed. However, contrary to Starch's data, the superiority was not manifest in the early trials.—*E. E. Ghiselli* (California).

6120. **Heron, W. T., & Skinner, B. F. Rate of extinction in maze-bright and maze-dull rats.** *Psychol. Bull.*, 1939, **36**, 520.—Abstract.

6121. **Hilgard, E. R., & Ohlson, J. A. Pupillary conditioning to auditory stimuli near the absolute threshold.** *Psychol. Bull.*, 1939, **36**, 577.—Abstract.

6122. **Horton, G. P., & Guthrie, E. R. A further study of the cat in the puzzle-box.** *Psychol. Bull.*, 1939, **36**, 521.—Abstract.

6123. **Howells, T. H. The innate differential in the social learning of fowls.** *Psychol. Bull.*, 1939, **36**, 566.—Abstract.

6124. **Hudson, B. B. A further study of one trial learning in rats.** *Psychol. Bull.*, 1939, **36**, 518.—Abstract.

6125. **Humphreys, L. C. The effect of random alternation of reinforcement on the acquisition and extinction of conditioned eyelid reactions.** *J. exp. Psychol.*, 1939, **25**, 141–158.—66 college students were conditioned to a light followed by a puff of air to the cornea. Training occurred under three different conditions: Group I was given 100% reinforcement for 96 trials, the light always being followed by the puff, followed by 24 extinction trials. Group II was given 50% reinforcement for 96 trials, the light being followed by the puff in half the trials, followed by 24 extinction trials. Group III was given 100% reinforcement for 48 trials, with 48 interspersed rest intervals where non-reinforced trials occurred in Group II, followed by 24 extinction trials. The results justify the following conclusions: (1) There are no differences in the acquisition of CR's, measured by frequency and magnitude, under the three procedures. This is evidence that non-reinforced trials do not always result in significant decrements (Group II). It also points to an advantage of spaced trials over an equal number of massed trials (Groups I and III). (2) There are differences in the extinction of the CR's between Group II (50% reinforcement) and Groups I and III (100% reinforcement). Group II responds at a significantly higher level over the 24 extinction trials than Groups I and III.—*H. W. Karn* (Pittsburgh).

6126. **Jeju, V. G. Intelect şi motricitate.** (Intellect and motility.) *J. Psihoteh.*, 1938, **2**, 33–38.

6127. **Karn, H. W., & Patton, R. A. The transfer of double alternation behavior acquired in a temporal maze.** *J. comp. Psychol.*, 1939, **28**, 55–561.—Two cats which mastered the right-right-left-left response in a temporal maze continued to respond with comparable accuracy when tested in mazes of larger and smaller dimensions. "These findings invalidate the hypothesis that double alternation behavior is acquired on the basis of a cumulative piling up of physiological effects as the subject performs the sequence of acts. By invalidating this hypothesis the results support, from a new angle, Hunter's original contention that the double alternation temporal maze is to be placed with the delayed reaction test as a method of demonstrating the presence of symbolic processes."—*N. L. Munn* (Vanderbilt).

6128. **Katona, G. Retention and transfer in different types of training.** *Psychol. Bull.*, 1939, **36**, 542–543.—Abstract.

6129. **Kellogg, W. N. "Positive" and "negative" conditioning, without contraction of the essential muscles during the period of training.** *Psychol. Bull.*, 1939, **36**, 575.—Abstract.

6130. **Loucks, R. B. An experimental investigation of chained responses to indirect conditioning.** *Psychol. Bull.*, 1939, **36**, 575–576.—Abstract.

6131. **McGeoch, J. A. Remote associations as a function of interpolated learning.** *Psychol. Bull.*, 1939, **36**, 545.—Abstract.

6132. **Meier, N. C. What is special ability?** *Psychol. Bull.*, 1939, **36**, 505.—Abstract.

6133. **Melton, A. W. The specificity of retroactive and proactive inhibition in serial verbal habits.** *Psychol. Bull.*, 1939, **36**, 544–545.—Abstract.

6134. **Miller, J. M. The effect of inhibitory and facilitatory attitudes on eyelid conditioning.** *Psychol. Bull.*, 1939, **36**, 577–578.—Abstract.

6135. **Montpellier, G. de, & Colle, J. Réactions conditionnées volontaires et involontaires.** (Voluntary and involuntary conditioned reactions.) *Arch. Psychol., Genève*, 1939, **27**, 134–156.—These experiments, performed on 74 subjects, studied two operations: conditioning of the psychogalvanic reflex and conditioning of the hand withdrawal reflex. The unconditioned stimulus was electrical stimulation of the finger, the conditioned stimulus being a noise. The authors conclude that the conditioning of the motor reaction was in general much less clear-cut than that of the psychogalvanic reaction.—*G. Dvoretzki* (Geneva).

6136. **Newman, E. B. The temporal factor in retroactive inhibition.** *Psychol. Bull.*, 1939, **36**, 543–544.—Abstract.

6137. **Nissen, H. W. Positional sequences in two-choice discrimination problems with non-positional cues.** *J. Psychol.*, 1939, **8**, 57–62.—In 2-choice discrimination problems behavior systematizations which involve response to spatio-temporal stimuli may raise the proportion of correct responses well above 50%. Spatial alternation may be eliminated as a secondary cue by equalizing the number of alternations and repetitions in the series. Behavior systematizations which involve response to spatio-temporal stimuli may be analyzed by examining the 2 trials preceding each response. If it is discovered that one response to a given spatio-temporal stimulus was reinforced more than its alternative, statistical correction may be made by averaging the percentage of scores obtained in each of two categories.—*J. McV. Hunt* (Brown).

6138. **Oxner, M. Les animaux dressés de l'aquarium de Monaco.** (The trained animals of the aquarium of Monaco.) *Bull. Soc. Océanogr. Fr.*, 1938, **18**, 1731–1738.—(*Biol. Abstr.* XIII: 7625).

6139. **Page, J. D. The effect of nursery school attendance upon the IQ.** *Psychol. Bull.*, 1939, **36**, 551.—Abstract.

6140. **Payne, B. An experimental comparison of old and young coordinations in normal college adults and diagnosed pathological cases.** *Proc. Ind. Acad. Sci.*, 1939, **48**, 184.—Abstract.

6141. **Peak, H. Negative vs. positive practice in correcting spelling errors.** *Psychol. Bull.*, 1939, **36**, 550.—Abstract.

6142. **Pillsbury, W. B. Retroactive inhibition tested immediately.** *Psychol. Bull.*, 1939, **36**, 544.—Abstract.

6143. **Punke, H. H. Age of parent and intelligence of offspring.** *Elem. Sch. J.*, 1939, **39**, 617–622.—Children of older parents tend to be more intelligent than those of younger parents.—*P. Witty* (Northwestern).

6144. **Razran, G. H. S. Semantic, syntactic, and phonetographic generalization of verbal conditioning.** *Psychol. Bull.*, 1939, **36**, 578.—Abstract.

6145. **Razran, G. H. S. A quantitative study of meaning by a conditioned salivary technique (semantic conditioning).** *Science*, 1939, **90**, 89–90.—An attempt was made to separate the semantic or meaning-content factor of verbal conditioning from its visual-auditory form, by using salivation as the conditioning technique. The author finds that the average transfer conditioning to the synonyms was 59%, while to the homophones it was 37%. "Within the limits of the present study the conclusion seems thus to be warranted that verbal conditioning is primarily semantic."—*F. A. Mote, Jr.* (Brown).

6146. **Riesen, A. H. Symbolic reactions for delayed reward and delayed response in chimpanzees.** *Psychol. Bull.*, 1939, **36**, 521–522.—Abstract.

6147. **Shumilina, N. I. [A contribution to the dynamics of the higher nervous activity. VII.]** *Arkh. biol. Nauk*, 1939, **54**, 119–131.—Simultaneous registration of the secretory and motor components of the conditioned reaction discloses the complex system of excitations proceeding in the central nervous system of the animal; e.g., when food stimulation is kept constant and the conditioned secretion proceeds in a uniform fashion the motor component of the conditioned reaction may change its sign, participating now in one, now in another complex of excitations. This fact emphasizes the complex nature of the central mechanisms of the conditioned reflex, which does not conform to the scheme of the "arc of the conditioned reflex." By studying the conditioned reflexes by means of the secretory-motor method it is possible to work out concurrently conditioned responses to various kinds of unconditioned enforcement (bread, meat). This union of qualitatively different kinds of unconditioned food stimuli offers great possibilities for studying the higher nervous activity. Introduction of meat as an unconditioned stimulus into a system of conditioned reactions already worked out results in disorganization of the established motor choice of the aspects of strengthening. Neither the secretory nor the motor component of the conditioned "meat" reaction shows any outward signs of special strength or quality of strengthening by meat. However, elimination of strengthening by meat discloses at once the actual structure of excitations which have existed in the central nervous system of the animal: regardless of the kind of stimulus, it prefers to run toward that side where it received meat, i.e., there has been established a dominance of a definite system of excitations. The fact that the preferential motor reaction toward the "meat" side lacks the common external signs of strength of conditioned excitation (secretion) shows that secretion as the principal index of higher nervous activity does not reflect completely the complex inner structure of excitations of the central nervous system under the conditions of active motor choice.—*P. Anokhin* (Moscow).

6148. **Sisson, E. D. Retroactive inhibition: the temporal position of interpolated activity.** *J. exp. Psychol.*, 1939, **25**, 228–233.—3 groups of subjects learned a list of 10 2-syllable adjectives, followed by a second list composed of synonyms of these words. 3 positions of interpolated activity were studied:

immediately after original learning, halfway between original learning and recall, and just prior to recall of the original list. The interval from learning to recall was 96 hours. The position halfway between learning and recall of the original list gave the least amount of retroaction. The introduction of a second list just prior to recall yielded less retroaction than when given just after learning of the first list. The results are explained in terms of confusion between constellations of associations and memory traces.—*H. W. Karn* (Pittsburgh).

6149. **Smith, D. E., & Pett, L. B. Learning ability of rats cured of rat pellagra.** *Psychol. Bull.*, 1939, **36**, 518–519.—Abstract.

6150. **Smith, H. L., & Eaton, M. T. The relation of retention to speed of learning.** *Bull. Sch. Educ. Ind. Univ.*, 1939, **15**, No. 3. Pp. 105.—Subjects were 24 college freshmen who learned 6 types of material, viz., nonsense syllables, words, names and dates, geometric figures, symbols, and poetry, to 3 degrees of original learning, viz., partial, complete, and overlearned. Retention was measured by recall and by relearning. The retention tests were given 7 times at varying intervals within a period of about 4 months. The data from the various combinations of degree of learning and materials used are presented for individual subjects in 63 tables. The general summary suggests that the relations found between retention and speed of learning are uniformly positive but not sufficiently large to be significant. The evidence suggests that "the relation between retention and speed of learning is an individual phenomenon."—*C. M. Louttit* (Indiana).

6151. **Tomaszewski, T. Metody badania dyspozycyj złożonych.** (Methods of measuring complex aptitudes.) *Kwart. psychol.*, 1939, **12**, 1–56.—The problem of the extent to which more complex aptitudes can be determined from the measurement of simpler aptitudes is discussed. By way of illustration the author investigates ways in which subjects memorize digits and positions in space separately, and then how they memorize digits in different positions. He finds individual differences in quality, quantity, and structure of memorizing under the simpler conditions that favorably or unfavorably influence memorizing under the more complex conditions. French summary.—*T. M. Abel* (New York City).

6152. **Verlaine, L. La notion du nombre chez le macaque. Acquisition par synthèse d'unités contiguës dans l'espace.** (Concept of number in the macaque: acquisition by synthesis of units contiguous in space.) *Bull. Soc. Sci. Liége*, 1938, No. 2, 135–148.—According to the author the behavior of the macaque indicates that it can acquire the concept of the number three by comparing small quantities of different objects. However, the units must be contiguous in space, not separated by a zero.—*R. Piret* (Liége).

6153. **Verlaine, L. La notion du nombre chez le macaque. Acquisition par synthèse d'unités contiguës dans le temps.** (Concept of number in the macaque: acquisition by synthesis of units contiguous in time.) *Bull. Soc. Sci. Liége*, 1938, Nos. 3–4, 309–321.—The author concludes from his experiments that the macaque can differentiate between small numbers by counting units up to three, without being able, however, to reduce this operation to a rhythm of two or three perceptions or reactions. Apparently the macaque's memory does not extend to the number four.—*R. Piret* (Liége).

6154. **Verlaine, L. Représentations concrètes et facultés de synthèse chez le macaque.** (Concrete representation and faculties of synthesis in the macaque.) *Bull. Soc. Sci. Liége*, 1938, No. 11.—The author seeks to ascertain whether the macaque is able to rise above a concrete representation to attain a higher stage of generalization based on a synthesis of the various properties of the equilateral triangle. He believes that if any progress is to be made in animal psychology, we must discard the prejudices inherent in the classical doctrines of the science.—*R. Piret* (Liége).

6155. **Verlaine, L. Le macaque sait-il compter? Notion du nombre ou rythme de préhension.** (Is the macaque able to count? The concept of number or rhythm of prehension.) *Bull. Soc. Sci. Liége*, 1939, No. 1, 51–61.—The author wishes to demonstrate that the macaque is able to add, for example, such items as the angles and sides of a geometric figure. The concept of a small number seems to begin with a prehension rhythm, a conclusion which various experiments seem to demonstrate.—*R. Piret* (Liége).

6156. **Watson, W. S., & Hartmann, G. W. The rigidity of a basic attitudinal frame.** *J. abnorm. soc. Psychol.*, 1939, **34**, 314–335.—The effect upon recall of pertinent arguments of strong atheistic and theistic attitudinal frames was studied. For the group under investigation, material subjectively judged to be effective was recalled in greater extent and with better quality than that rated as having average effectiveness, and material which supported the subject's attitudinal frame was retained better than material which opposed it. Although the results as a whole consistently buttress these conclusions, most of the differences taken singly are not statistically significant. The limited number of subjects and presentation of the material in pairs of arguments are probably major factors concealing larger differences.—*C. H. Johnson* (Portland, Ore.).

6157. **Wellman, B. L. The IQ: a reply.** *J. Psychol.*, 1939, **8**, 143–155.—The author replies to the critical comments appearing in Simpson's article (see XIII: 5096) with detailed evidence from a number of her recently published reports.—*J. McV. Hunt* (Brown).

6158. **Wickens, D. D. A study of voluntary and involuntary conditioning.** *J. exp. Psychol.*, 1939, **25**, 127–140.—Three procedures, one involving involuntary conditioning and two involving voluntary conditioning, were used in this study. Subjects of the involuntary group lifted the finger when they received a shock. One voluntary group was re-

quired to lift the finger as rapidly as possible when a light flashed; the other was also required to lift the finger in response to a light, but in addition the subjects were told that if they did not respond quickly they would receive a shock. This, however, was only a threat, and those in this group were never shocked. Results indicate that: (1) There is a difference between voluntary and involuntary groups in the curve of acquisition of the CR, the amount of conditioning, the relation between latency and the frequency of the CR, the speed of extinction, and the ability to inhibit the response. (2) There was a tendency for the light-threat group to occupy a position between the light and the shock groups. (3) In almost all respects all three groups showed some degree of similarity. It is concluded that conditioning of finger retraction to shock is not voluntary, and further that the dichotomization of conditioning behavior into categories of voluntary and involuntary conditioning is not justifiable.—*H. W. Karn* (Pittsburgh).

6159. **Wile, I. S., & Davis, R. M. Behavior differentials of children with IQ's 120 and above and IQ's 79 and below, with some reference to socio-economic status.** *Amer. J. Orthopsychiat.*, 1939, **9**, 529–540.—100 cases of children with IQ's between 120 and 148 and 100 with IQ's between 50 and 79 were compared in terms of character of behavior difficulties, scholastic standing, social maturity as measured on the Vineland scale, ordinal position in the family, Sims score card for socio-economic status, instrumental delivery, physical problems, and other factors. No specific conclusions were drawn, but it was pointed out that the problems and difficulties of the superior group were no less numerous than those of the inferior group. The superior group is more readily adaptable socially. There is also an indication of greater personality threat to the superior group.—*R. E. Perl* (New York City).

6160. **Wright, H. F. The influence of goal-distance and route-security upon the velocity of directed action.** *Psychol. Bull.*, 1939, **36**, 546–547.—Abstract.

[See also abstracts 5995, 6000, 6029, 6031, 6037, 6038, 6071, 6174, 6175, 6188, 6209, 6232, 6249, 6252, 6275, 6281, 6302, 6309, 6328, 6374, 6407, 6408, 6455, 6481, 6498, 6517, 6543, 6552, 6554.]

MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

6161. **Allen, E., Danforth, C. H., & Doisy, E. A. [Eds.] Sex and internal secretions.** (2nd ed.) Baltimore: Williams & Wilkins, 1939. Pp. 1370. $12.00.—25 authors present new experimental evidence concerning the endocrinology of sex function. The sections of the book are: (1) biological basis of sex; (2) physiology of sex glands, germ cells, and accessory organs; (3) biochemistry and assay of gonadal hormones; (4) the hypophysis and the gonadotropic hormones of blood and urine in relation to the reproductive system; and (5) additional factors in sex functions and endocrine applications in man. The chapter on sex drive, by C. P. Stone, is of interest to psychologists.—*N. R. Bartlett* (Brown).

6162. **Atzler, E. Arbeitsphysiologie.** (Physiology of work.) *Ergebn. Physiol.*, 1939, **41**, 164–291.—Review of the more practical problems.—(*Biol. Abstr.* XIII: 9493).

6163. **Bash, K. W. An investigation into a possible organic basis for the hunger drive.** *J. comp. Psychol.*, 1939, **28**, 109–135.—This experiment was planned to test the "organic drive" theory of motivation. Adult male rats subjected to vagectomy and sympathetic block were tested in activity cages, an obstruction box, and a maze to determine the effect of the operation upon motivated behavior. Although the operation isolated the stomach from the central nervous system and markedly changed the food behavior of the rats, a hunger drive which provided efficiently for the needs of the animals was still operating. From results of the above-mentioned behavioral tests, the author concludes that "(1) the normal animal is stimulated to approach and ingest food by periodically recurring gastric peristalsis. (2) Richter's theory of the origin of periodic activity is confirmed. (3) Under certain conditions, after gastric sensations have been abolished, the hunger drive is maintained in undiminished strength by some biological process in which afferent neural impulses from the stomach play no part." Bibliography.—*N. L. Munn* (Vanderbilt).

6164. **Bash, K. W. Contribution to a theory of the hunger drive.** *J. comp. Psychol.*, 1939, **28**, 137–160.—A theoretical evaluation of the results of the previous investigation by the author and of other relevant data is undertaken. As a result of this evaluation, the following tentative conclusions are advanced: "(1) That behavior of the normal organism which is directed toward the acquisition and ingestion of food is for the most part learned, not innate; and the organic drive theory probably offers the best explanation of how it is acquired. (2) Besides gastric hunger contractions, contributory factors to the hunger drive in normal, mature organisms are: psychological appetite, processes of an undetermined nature in the small intestine, and general bodily weakness consequent upon depletion of stored nourishment in the body. (3) Not these contributory factors, but a thoroughly automatized conditioned response to stimulation of the distance receptors by foodstuffs, acquired in infancy and based upon an innate chemo-reflexive response to stimulation by certain tastes, is primarily responsible for the maintenance of the hunger drive in the operated animal and in the very young organism." Extensive bibliography.—*N. L. Munn* (Vanderbilt).

6165. **Benetato, G. Influence de l'effort physique répété sur le niveau de fonctionnement des capsules surrénales chez l'homme.** (The effect of repeated physical effort on the level of adrenal functioning in man.) *Travail hum.*, 1931, **7**, 153–162.—The

technique is based on the fact that with adrenal hypofunction, the administration of histamine causes a marked drop in blood pressure and other symptoms. Trained athletes after exercise showed insignificant change in blood pressure with histamine injection and also subjective tolerance, suggesting adrenal hyperfunction. With untrained subjects individual differences were evident, pyknics tolerating the histamine better than leptosomes. This confirms the hypothesis that pyknics have a predominance of anabolic glandular function.—*H. E. Burtt* (Ohio State).

6166. **Biel, W. C. The effects of early inanition on a developmental schedule in the albino rat.** *J. comp. Psychol.*, 1939, **28**, 1–15.—Rats subjected to severe inanition from 24 hours after birth until the 25th day were inferior to controls in various measures of development. Statistically significant differences were found for opening of the external ear, response to sound, opening of the eyes, and errors and time on the maze. The inferiority was not permanent; growth merely proceeded at a slower rate. Bibliography.—*N. L. Munn* (Vanderbilt).

6167. **Blumenfeld, W. Esquema de una teoría del juego.** (A theory of play.) *Rev. Fil. Derech.*, 1939, **4**, 18–26.—Four classical theories of play are reviewed and their inadequate features discussed. Play is said to be conduct which satisfies a tendency to avoid tedium and to escape from reality.—*R. M. Bellows* (Maryland).

6168. **Carmichael, L. The effect of sensory stimulation on heart rate of fetal, new-born, and adult guinea-pigs.** *Psychol. Bull.*, 1939, **36**, 535–536.—Abstract.

6169. **Ceni, C. Die Psyche im Lichte der Biologie des Mutterinstinktes.** (The psyche in the light of the biology of the maternal instinct.) *Schweiz. Arch. Neurol. Psychiat.*, 1938, **42**, No. 2.—The author treats separately the psycho-organic factor of the maternal instinct and the humoral factor. (1) He seeks to prove, from experiments on the corticality of ducks and dogs before and after gestation, the existence of a higher center for the maternal instinct which is localized in the frontal pole. Engrams arising from reproduction and registered by the mother are not sufficient to form the maternal instinct by themselves. A special frontal center must be set in action by these same engrams in order that the higher form of the maternal instinct may be manifested. The author succeeded in separating these two groups of phenomena in his operative animals. (2) Taking up the humoral factor, the author maintains that the functional cycle of the sexual endocrine glands is antagonistic to another group of glands, the hypophysis, thyroid, and adrenal glands, which regulate the maternal instinct. When one group of the above is in the ascendancy, the other is declining. The maternal instinct is, therefore, opposed to the function of gestation or at least is independent of it.—*M. Hareven* (Le Landeron).

6170. **Claparède, E. Hérédité fatale et hérédité conditionnelle.** (Fixed and conditional inheritance.) *In* Various, *Mélanges en l'honneur de G. Borea.* Athens: 1939. Pp. 63–68.—It is generally agreed that two types of heredity are distinguishable: a fixed inheritance in which a gene produces a certain characteristic regardless of environment, and conditional inheritance, in which the gene produces one characteristic or another in accordance with the environment in which the individual develops. Genetics has demonstrated the existence of both kinds in animals and plants. Since it is probable that psychological characteristics may also depend sometimes on a fixed inheritance and sometimes on a conditional inheritance, it is very important to determine which aptitudes (or inaptitudes) are fixed and which may be modified by education.—*G. Dvoretzki* (Geneva).

6171. **Cornsweet, A. C. Recovery sequence after anesthetization with ethyl alcohol.** *Psychol. Bull.*, 1939, **36**, 534.—Abstract.

6172. **Crutchfield, R. S. Psychological distance as a function of the intensity of psychological need.** *Psychol. Bull.*, 1939, **36**, 503–504.—Abstract.

6173. **Eisenbud, J. A method for estimating the effect of repression on the somatic expression of emotion in vegetative functions: a preliminary report.** *Psychosom. Med.*, 1939, **1**, 376–387.—A description of the method used in testing the hypothesis that "the function of repression varies directly with the excitement of the parasympathetic branch of the autonomic nervous system." Indices of the A. N. S. activity used were gastric motility and the parotid gland secretory rate. Results of the experiments with gastric motility harmonized with the hypothesis. Those with the parotid gland secretory rate were suggestive, but require further examination with careful controls.—*P. S. de Q. Cabot* (Simmons).

6174. **Ellson, D. G. A spontaneous recovery curve for the galvanic skin response in human subjects—a discrepancy between results obtained in theoretically parallel G. S. R. (human) and bar-pressing (rat) experiments.** *Psychol. Bull.*, 1939, **36**, 543.—Abstract.

6175. **Fischel, W. Psyche und Leistung der Tiere.** (The mind and capacities of animals.) Berlin: de Gruyter, 1938. Pp. vi + 290. RM. 15.—Fischel takes the affects as the starting point of a critical review of the role of the psyche in the animal world. The primary composite activities are treated in connection with the lower species, e.g., the migrations of birds and bats. The simplest form of learning, next to habit, is the association between perception and affect, and the most primitive learned behavior can be traced back to kinesthesia. In this connection labyrinthine function is discussed. Instinct can be defined only as the factor on which the form of behavior depends. The biological meaning of instincts is discussed in connection with the sex instinct. Three extensive sections of the book

treat of the intelligence of the higher animals and Fischel's new experiments with multiple choice. Not learning, but the use of what is learned differs according to the families of reptiles, birds, monkeys, and other mammals. In conclusion, the aims of the activities of the higher animals and the role of the psyche in their life as a whole is discussed. The decisive difference between man and the lower animals is a difference in the purposes of their striving, while in the means of attaining ends man and the chimpanzee differ only in degree.—*W. Fischel* (Münster).

6176. **Fisher, V. E. A new approach to the old problem of emotional stability.** *Psychol. Bull.*, 1939, **36,** 563–564.—Abstract.

6177. **Gatti, E. Sintomatologia percettivo-motoria dell' affaticamento nel decorso di una giornata di lavoro.** (Perceptual-motor symptoms of fatigue in the course of a day's work). *Riv. Psicol. norm. pat.*, 1939, **35,** 23–46.—The author describes an apparatus and experiment for measuring (1) tactile-kinesthetic perception of resistance, and (2) amount of pressure exerted by the index finger at different periods during the working day. 10 workmen acted as subjects. The relationship between variations in performance and fatigue is discussed.—*T. M. Abel* (New York City).

6178. **Granaat, D. An experimental research as to the pupil reaction during the time of ingestion.** *Arch. néerl. Physiol.*, 1939, **24,** 25–52.—Pupil movement was studied in dogs by means of a pupillometer during the time they were eating. Dilatation usually occurred as the animals snatched food they liked to eat. This appeared in dogs of 2½ to 3 months as well as in older animals. When a preferred food had been given several times, the dilatation appeared at merely the sight of the food. Many factors caused variations in the amount and direction of pupillary change. Mydriasis was checked by strong light, sleepiness, mild morphine narcosis, fear or attitudes of disinclination, and proximity of a rutting bitch to a male. Unpleasant odors combined with food usually checked pupillary dilatation. Accommodation and convergence did not seem to oppose the reaction. Some sound stimuli had no influence on the reaction, but those that caused a mild state of fear served as a check. Unpleasant taste substances checked the dilatation and pain stimuli caused a kind of excitement in which no eating and consequently no pupillary enlargement was seen. Under certain conditions a conditional miosis could be set up.—*C. P. Stone* (Stanford).

6179. **Gray, J., & Lissmann, H. W. Studies in animal locomotion: VII. Locomotory reflexes in the earthworm.** *J. exp. Biol.*, 1938, **15,** 506–517.—This paper reports studies, cinematographically and electrically recorded, of ambulation in the earthworm, both normal and decapitated specimens. In the absence of longitudinally applied tension, an intact or decapitated animal is found to exhibit peristalsis only so long as it is ventrally in contact with the substratum. Reflex responses of decapitated animals are found to depend on the conditions of stimulation. When the muscles of a segment are responding to stimuli reaching them from the efferent tracts of the nerve cord, they are simultaneously exposed to mechanical tension (produced by muscle movements of anterior segments), which causes a reflex identical in nature with that induced directly by the cord. Such tension reflexes are functionally significant chiefly when the animal moves over irregular surfaces. During normal peristalsis the nerve cord is found to exhibit an electrical rhythm identical in frequency with the muscular rhythm. Peristalsis can be elicited in an inactive decapitated animal by making the anterior end electropositive to the posterior. Reversing the direction of the current inhibits the peristalsis. 10 references.—*C. K. Trueblood* (Harvard).

6180. **Gregg, F. M. Are motor accompaniments necessary to orientational perception?** *J. Psychol.*, 1939, **8,** 63–97.—The author reports several experimental studies designed to determine whether, in thinking of geographic directions, a subject tends to respond in motor terms coincident with his thinking. It is concluded from both the positive overt and covert responses that to entertain a thought of geographic orientation is to take either an overt or a covert response to the perceived direction. The apparent negative responses may still conceal positive tensions that are hidden within the algebraic sums of the two opposing tensions.—*J. McV. Hunt* (Brown).

6181. **Hall, C. S. A comparison of the weights of the adrenal, thyroid and pituitary glands of emotional and non-emotional strains of rats.** *Psychol. Bull.*, 1939, **36,** 564.—Abstract.

6182. **Harsh, C. M., Beebe-Center, J. G., & Stevens, S. S. The relation of pilomotor, pupillary, cardiac and respiratory responses.** *Psychol. Bull.*, 1939, **36,** 537.—Abstract.

6183. **Hoeve, J. v. d., & Roelofs, C. O. Über die Wirkung der Augenmuskeln.** (On the action of the muscles of the eye.) *Arch. Augenheilk.*, 1936, 110, 1–13.—Emphasizing the complexity of the problem, and recalling the work of Hoeve published in 1922, which requires correction, the authors present the results of their calculations. They deduce the axis of rotation of each muscle, and their moments (the two oblique muscles are shown to be perfectly antagonistic). Every movement of the eye requires the contraction of at least three muscles; the relative forces of their action for the eight principal directions are given. The authors warn that the precision of their results must not be permitted to lead one to overlook individual deviations affecting anatomical coordinations.—(Courtesy *Année psychol.*)

6184. **Hunt, J. McV., & Schlosberg, H. General activity in the male white rat.** *J. comp. Psychol.*, 1939, **28,** 23–38.—The writers were interested in finding a quantitative indicator of experimental neurosis in rats. General activity appeared to be a

promising index, hence they devised a series of activity cages the records from which could be treated quantitatively. Each unit was essentially an inertia contactor attached to the bottom of a bird cage suspended by means of a spring. Preliminary results with 5 rats, while they indicate the short cycles described by Richter, also show that these cycles are too variable for quantitative treatment in connection with the present problem. When the data are treated for individual animals and physical condition is carefully watched, 3 promising variables are available for analysis. These are: (1) total number of 5-minute periods in which activity is recorded during the day, (2) percentage of these which occur during the dark hours, and (3) the standard deviation of total activity. Most of the activity occurs during the dark hours. Bibliography.—*N. L. Munn* (Vanderbilt).

6185. **Jastak, J. The ambigraph laterality test.** *J. appl. Psychol.*, 1939, **23**, 473–487.—A battery of tests which may be used to indicate laterality is described. The battery includes measures of hand and eye preferences and bi-manual drawing. Scoring procedures and norms are given.—*E. E. Ghiselli* (California).

6186. **Johnson, W. B., Kuznets, G., & Terman, L. M. Highlights in the literature of psychological sex differences published since 1920.** *Psychol. Bull.*, 1939, **36**, 569.—Abstract.

6187. **Kaminskaja-Pavlova, Z. A. [The relation between intraocular tension and pupillary reaction to pain.]** *Věstn. Oftal.*, 1939, **14**, Part 4, 29.—In 20 out of 35 rabbits tested after pinching or pricking the skin of the nose at the exit of branches of the nasal nerve, there was raised intraocular tension paralleled by an increase in pupillary diameter. The aqueous of these eyes produced increased rhythm in the isolated frog's heart. The author believes that active substances in the aqueous are liberated by the vegetative innervation of the iris.—*D. J. Shaad* (Institute of Ophthalmology, New York City).

6188. **Keller, F. S. Some experimental operations affecting drive constancy.** *J. comp. Psychol.*, 1939, **28**, 63–72.—Periodic reconditioning curves were obtained for rats trained with Skinner's type of apparatus under conditions of 12-, 22-, and 34-hour food deprivation. The 22-hour period of deprivation was most effective in keeping the P–R curves linear in slope. However, one rat gave similar curves for both 12- and 22-hour deprivations. Two general conclusions are presented: (1) Since the present results were obtained in a large, relatively quiet, and well-lighted room, the sound-proofing, light-proofing, etc., of the Skinner experiments is unnecessary for appearance of the P–R curves. Second, a "very constant hunger drive" is present under conditions of 22-hour deprivation but not under the other conditions used in this study.—*N. L. Munn* (Vanderbilt).

6189. **Kleitman, N. Sleep and wakefulness.** Chicago: Univ. Chicago Press, 1939. Pp. 638. $5.00.—The author brings up to date a summary of the literature on sleep consisting of more than 1400 titles, most of which have appeared since Piéron's review of the subject in 1912, and discusses in relation to this material his own extensive studies of sleep. Sleep and wakefulness are defined as alternating phases in the cycle of existence. Part I treats of the physiological variables such as tonicity of musculature and position of body, reflex excitability, brain potentials, composition of blood, heart rate, circulation, respiration, digestion, and metabolism, by which functional differences between sleep and wakefulness may be demonstrated. Part II shows how physiological and psychological measures have been utilized in attempts to determine the time of onset of sleep and its depth. Other factors discussed are the amount and time of greatest motility during sleep, the nature and occurrence of dreams, the duration of sleep, and the conditions accompanying awakening. Part III treats of periodicity both within and without the organism, but particularly relates the diurnal variations in activity and performance to the temperature and visceral rhythms. The experimental production of sleep in man and animals and the effects of sleep deprivation are discussed in Part IV. Part V deals with the abnormal interruptions in the sleep-wakefulness cycle which appear in the form of narcolepsy, catalepsy, encephalitis lethargica, and the hyper- and hypo-insomnias. Part VI deals with the hygiene of sleep and the means of modifying sleep by pharmacological agents. Conditions resembling sleep, such as hibernation and hypnosis, are discussed in Part VII. The final section contains a discussion of the various neural and humoral theories of sleep and concludes with the author's evolutionary theory of sleep.—*D. B. Lindsley* (Brown).

6190. **Kleyn, A. de. Partial failure of labyrinthine reflexes.** *Acta brev. néerl. Physiol.*, 1939, **9**, 101.—(*Biol. Abstr.* XIII: 9489).

6191. **Krout, M. H. Understanding human gestures.** *Sci. Mon., N. Y.*, 1939, **49**, 167–172.—Gestures as a form of human behavior have been much neglected by the psychologist. There are the conventional gestures used for purposes of communication and social control, the tics, and what the author calls autistic (or self-directed) gestures. These latter are held to have an emotional background and to bear a definite relation to personality types. It is suggested also that a certain group of gestures may have similar meaning in various individuals.—*O. P. Lester* (Buffalo).

6192. **Krueger, F., & Klemm, O. [Eds.] Motorik. Schluss.** (Motor phenomena. Conclusion.) *Neue psychol. Stud.*, 1938, **9**, No. 4.

6193. **Lovell, C. A study of personal variation in hand-arm steadiness.** *Psychol. Bull.*, 1939, **36**, 522.—Abstract.

6194. **Migliorino, G. Automatismi superiori: il riso.** (Superior automatisms; laughter.) *Riv. Psicol. norm. pat.*, 1939, **35**, 47–60.—The most important theories of laughter are examined and criticized. Clinico-anatomical material is discussed and the

psychophysical mechanisms of laughter are explained.—*T. M. Abel* (New York City).

6195. **Miles, W. R. The steady potential of the human eye in subjects with unilateral enucleation.** *Proc. Nat. Acad. Sci., Wash.*, 1939, **25**, 349–358.—The steady polarity potential was studied in 9 subjects each of whom had suffered unilateral enucleation and wore one artificial eye at the time of the experiment. The method employed was that previously used with normal subjects. The potential of the active eye corresponded closely with the values found for normal two-eyed people. The region about the artificial eye showed smaller potentials which were of the same sign as that of the active eye when it deviated vertically, but were of opposite sign when it deviated laterally. It is concluded that these potentials arise from the spread of electrical energy through the tissues from the active eye.—*D. E. Smith* (Alberta).

6196. **Miles, W. R. Influence of pressure and other factors on the polarity potential of the human eye.** *Psychol. Bull.*, 1939, **36**, 536.—Abstract.

6197. **Millet, J. A. P. Insomnia: its causes and treatment.** New York: Greenberg, 1938. Pp. 195. $1.75.—This book contains a preface by a patient and 8 chapters entitled: the magic of sleep, physiology of sleep, disturbances of sleep, dreams, nostrums and quackery, treatment of insomnia, sleep and civilization. It is based in large part upon the author's study of 300 patients, constitutes a review of the phenomena of sleep, and lists the disturbances of sleep as (1) difficulty in getting to sleep, (2) early waking and morning restlessness, (3) interrupted or broken sleep, (4) too short a sleep period, (5) unexplained drowsiness, (6) too heavy or too long a sleep at night, (7) inverted sleep habits. The author concludes that disturbances of sleep may be ascribed to organic diseases, toxemias, emotional conflicts, and faulty habit formation. The chapter on dreams develops along psychoanalytic lines, and in the treatment of insomnia the author insists upon a complete diagnostic study, including an evaluation of the emotional life. Case histories are used to illustrate treatment. In the concluding chapter observations are made on various sociogeographical aspects of sleep, and the need is stressed for a more wholesome educational program for children. A bibliography of 73 titles is appended.—*M. H. Erickson* (Eloise Hospital).

6198. **Morgan, C. T. The effect of partial denervation of the stomach upon hunger in white rats.** *Psychol. Bull.*, 1939, **36**, 534–535.—Abstract.

6199. **Munn, N. L. The effect of a knowledge of the situation upon judgment of emotion from facial expressions aroused in everyday life.** *Psychol. Bull.*, 1939, **36**, 568–569.—Abstract.

6200. **O'Kelly, L. I., & Steckle, L. C. A note on long enduring emotional responses in the rat.** *J. Psychol.*, 1939, **8**, 125–131.—6 male rats, confined together in a cage floored with a wire grid, were submitted to intermittent electric shocks. These animals developed aggressive behavior, consisting of violent fighting. Progressively shorter periods of shock produced longer periods of sustained aggressive behavior. In the final test period 51″ of shock spread over 315″ produced aggressive behavior continued for 17 hours. Conventional concepts of conditioning are seen as inappropriate to the explanation of this behavior because of the lack of extinction. "It is suggested that this behavior, occurring as it does in a social situation, closely resembles the adjustment mechanism of 'projection.' "—*J. McV. Hunt* (Brown).

6201. **Papanicolaou, G. N., & Seward, J. P. Artificial oestrus in the guinea pig without ovaries and uterus.** *Psychol. Bull.*, 1939, **36**, 535.—Abstract.

6202. **Parker, M. M. The interrelationship of six different situations in the measurement of emotionality in the adult albino rat.** *Psychol. Bull.*, 1939, **36**, 564–565.—Abstract.

6203. **Pringle, J. W. S. The motor mechanism of the insect leg.** *J. exp. Biol.*, 1939, **16**, 220–231.—This paper reports electrically recorded experiments on the motor mechanism of the leg of the cockroach, *Periplaneta americana* L. Particular attention is given to the metathoracic segment and third pair of legs. The motor system of the whole leg is studied, and the range of normal activity in one muscle, the extensor tibiae, is examined in detail. Double motor innervation was noted for the muscle, and is described; the two nerves produce respectively a tonic contraction and a twitch. These types of contraction are discussed in comparison with effects of similar double innervation in certain crustacean muscles. No evidence was found for the existence of inhibitory fibers. The distribution of motor fibers to the muscles of the metathoracic leg is described, and the mobilization of muscle in the normal activity of the insect is discussed. 17 references.—*C. K. Trueblood* (Harvard).

6204. **Rey, A., & Osterrieth, P. Dominance de l'organisme mental sur l'organisme physique. La réaction d'occlusion des yeux.** (Dominance of the mental organism over the physical; the reaction of closing the eyes.) *Arch. Psychol., Genève*, 1939, **27**, 157–171.—119 subjects were instructed to close their eyes and not to open them until permission was given. Then they were given certain stimuli, e.g., they were asked questions, were requested to solve mental arithmetic problems, etc. It was found that some of the subjects opened their eyes at certain moments in spite of instructions; these reactions occurred more frequently in the younger subjects. Thus only 16% of the children from 4 to 6 years of age did not open their eyes, while 70% of the children from 12 to 14 years of age obeyed instructions. The experiment illustrates how difficult it is to inhibit a physiological reaction, and indicates the degree of dominance of the mental over the physical organism.—*G. Dvoretzki* (Geneva).

6205. **Samzelius-Leijdström, I. Researches with the bilateral tronchopneumograph on the movements of the respiratory mechanism during breathing.** *Acta oto-laryng., Stockh.*, 1939, Suppl. 35. Pp. 104.—The

apparatus is a triangular stand with adjustable cork cushions which transmit the respiratory movements to a recording pen. In 94.5% of 182 subjects, the movements of half of the thorax were increased when the inhalation path was changed from the contralateral to the homolateral nostril and decreased by the reverse procedure. These phenomena take place by way of the fasciculus longitudinalis dorsalis, which carries motor impulses from the olfactory bulb down the spinal cord; this tract does not cross. "Through other sensory nerves of the body the respiratory movements can be altered *reflexly*. . . . Thus functionally the respiratory mechanism is divided into two halves, and this in a longitudinal direction." Analysis of data on the course of respiration during ten breaths showed that for girls no one type of breathing was predominant; one third are suprathoracic, one third infrathoracic, and one third abdominal breathers. Most of the boys and men were abdominal breathers. Of the 10 women, 8 were suprathoracic breathers.—*E. M. Pilpel* (New York City).

6206. **Schneirla, T. C. A theoretical consideration of the basis for approach-withdrawal adjustments in behavior.** *Psychol. Bull.*, 1939, **36**, 501–502. —Abstract.

6207. **Schroedersecker, F. Über das psychomotorische Tempo der Konstitutionstypen.** (The psychometric tempo of the constitutional types.) *Z. mensch. Vererb.- u. KonstLehre*, 1939, **23**, 259–277. —The aim was to determine the correlation between psychometric tempo and constitutional type. The 90 testees represented the athletic, pyknic, leptosome, cycloid, schizoid, and viscous types, as well as various types of vocation. The procedure included an oral questionnaire and discussion and a series of 5 tests—tapping, Morse (2 numbers), metronome, and sorting. Results showed that the psychometric tempo is essentially constant; the athletic-viscous types show the slowest tempo, the leptosome-schizoid types the most rapid; the results indicate the characteristic tempi of the vocational groups as well.—*S. W. Downs* (Berkeley, Calif.).

6208. **Seward, G. H. The role of hunger in the filial behavior of the young guinea pig.** *Psychol. Bull.*, 1939, **36**, 566–567.—Abstract.

6209. **Shock, N. W. Pulse rate response of adolescents to ideational and sensory stimuli.** *Psychol. Bull.*, 1939, **36**, 563.—Abstract.

6210. **Smith, M. F., & Smith, K. U. Thirst-motivated activity and its extinction in the cat.** *J. gen. Psychol.*, 1939, **21**, 89–98.—7 cats, after 24 or 48 hours of water deprivation, were placed in a modified Skinner box. Curves of drinking to satiety were obtained. For extinction, the first response of the animal was reinforced with milk, and thereafter extinction was brought about, continuing until "a prolonged period of inactivity indicated decisively that the animal had ceased responding." A straight line was the most characteristic drinking curve (number vs. time graphs of drinking during one experimental period), though rates of responding varied widely. At satiation activity abruptly ended. Segmental curves also were secured, and, rarely, curves similar to those described for rats by Skinner. Extinction curves showed a steep rise and abrupt termination, again differing from those for rats.—*C. N. Cofer* (Brown).

6211. **Sollenberger, R. T., & Hamilton, J. B. The effect of testosterone propionate upon the sexual behavior of castrated male guinea pigs.** *J. comp. Psychol.*, 1939, **28**, 81–92.—15 adult male animals castrated prepubertally were divided into two groups. The animals of group B served as controls when those in group A received injections. After a long period of hormone withdrawal, group A served as control for group B, then injected. Criteria of the influence of the hormone were: (1) frequency of mounting; (2) total copulation time with a receptive female within a period of 10 minutes; (3) frequency of contacts involving nudging, licking, etc.; and (4) attempts to mount non-receptive females in a 3-minute period. By every criterion, animals receiving injections of testosterone propionate exhibited more sexual activity than did controls injected with oil. Withdrawal of the hormone decreased sexual activity. These observations hold not only for averages but, with a single exception, for individual animals. Bibliography.—*N. L. Munn* (Vanderbilt).

6212. **Stone, C. P. Temporal relationships in the copulatory acts of adult male rats during three hour tests.** *Psychol. Bull.*, 1939, **36**, 535.—Abstract.

6213. **Tussing, L. A study of sex differences in food likes and dislikes.** *Proc. Ind. Acad. Sci.*, 1939, **48**, 198–199.—A list of 289 food items was checked for likes and dislikes by 184 men and 214 women, all college students. The actual choices made are not given, but the results indicate that "women are relatively stronger in their dislikes; men, in their likes."—*C. M. Louttit* (Indiana).

6214. **Wilson, F. H. Preliminary experiments on the color changes of *Anolis carolinensis* (Cuvier).** *Amer. Nat.*, 1939, **73**, 190–192.—(*Biol. Abstr.* XIII: 9453).

6215. **Wolfe, J. B. An exploratory study of food-storing in rats.** *J. comp. Psychol.*, 1939, **28**, 97–108. —The investigator's aim was to ascertain how food-storing behavior in non-hungry rats is influenced by habit and diet. Food-storing behavior is evidenced by "a rat's coming out of its cage onto a runway, securing a food-pellet between its teeth, carrying it to some particular spot in the cage for deposit, and then repeating the act without consuming any of the food." Food-storing was fairly consistent over a 10-day period and decreased within the daily work period of 30 minutes. Rats which had eaten pellets from infancy manifested the behavior more than did rats fed with powder. The amount stored was increased by hunger. Non-hungry rats reared on an inadequate diet were persistent storers of food, while those reared on an adequate diet rarely manifested the behavior.—*N. L. Munn* (Vanderbilt).

6216. **Woods, F. A. The inheritance of strong parental instinct.** *J. Hered.*, 1939, **30**, 237–244; 313–320.—The genealogical section of the 1923 edition of the *Almanach de Gotha* was searched for data on 21 royal families of ancient pedigree, numbering in all 903 persons. These families, reigning and deposed, have many more children than the average, 17 cases showing fraternities of 7 or more living children, with only 2 that fall short of having well over 3 children, and none averaging less than 2.5 per family. Continued historical importance of a family is correlated with present-day size, with only 4 families exhibiting fewer than 10 individuals. The most famous are also the most ancient, with two slight exceptions. Neither adherence to the Catholic faith nor desire for male heirs is found to be the reason for this high degree of royal fecundity, the conclusion being that here is a demonstration of the inheritance of parental instinct.—*G. C. Schwesinger* (American Museum of Natural History).

6217. **Yerkes, R. M. Presidential address: The life history and personality of the chimpanzee.** *Amer. Nat.*, 1939, **73**, 97–112.—The anatomical and behavioral development of the chimpanzee is traced in terms of three series of events: the sexual cycle, the reproductive cycle, and the life cycle. Characteristics of social behavior, such as dominance, co-operation, confidence, etc., are discussed.—*N. R. Bartlett* (Brown).

[**See also abstracts 6007, 6027, 6028, 6029, 6035, 6041, 6043, 6047, 6053, 6076, 6105, 6109, 6116, 6126, 6160, 6259, 6322, 6416, 6515, 6535, 6552.**]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

6218. **Bychowski, G. Les relations entre le moi et le surmoi.** (The relations between the ego and the super-ego.) *Rev. franç. Psychanal.*, 1939, **11**, 49–59.—The various types of relationship which may exist between the ego and the super-ego are of importance not only in intrapsychic dynamics, but also in the relations maintained by the individual with other persons. The latter frequently are endowed with characteristics originally attributed to the super-ego. In this manner the ego makes a vain attempt to liberate itself from the traits which it does not possess and which weigh heavily upon it in the form of the super-ego.—*H. Beaumont* (Kentucky).

6219. **Deri, F. On sublimation.** *Psychoanal. Quart.*, 1939, **8**, 325–334.—The term "sublimation" is used usually to denote that outcome of instinct development characterized by (1) deflection of the instinct from its original aim, (2) deflection of the instinct from its original object, and (3) gratification of the instinct by means of activity having a more acceptable social or cultural value than the original form of expression. If, however, attention is given to the capacities for achievement and for enjoyment, consideration of sublimation suggests that: (1) Sublimation is the result of an ego defense against pregenital impulses. (2) Only such pregenital impulses can be sublimated as have their source in bodily organs subserving self-preservation. (3) Pregenital impulses which are derived and split off from the functions of bodily organs yield the energy for human achievement. (4) Genital impulses cannot be sublimated. (5) Genital impulses subserve solely the purpose of enjoyment. These various points are elaborated, with emphasis placed on the point that pregenitality is highly significant in all social and cultural achievements, since pregenital energies are first united with the activities of self-preservation, later with the various spheres of enjoyment, and at maturity serve the matured ego in achievement.—*M. H. Erickson* (Eloise Hospital).

6220. **Deutsch, F. The associative anamnesis.** *Psychoanal. Quart.*, 1939, **8**, 354–381.—The author has made a study of 40 patients suffering from a variety of symptom complexes by a technique of associative anamnesis, with the study based on the concept of an organ neurosis constituting an expression of neurotic conflict in terms of an organic disturbance of specific inevitability. Discussion is given of various measures for obtaining satisfactory psychosomatic anamneses. The author then discusses the associative technique he utilizes, in which the patient is allowed to talk freely without being questioned except for the repetition of some previous significant utterance when spontaneous remarks fail. Two such associative anamneses are given with parallel annotations to illustrate the effectiveness and completeness with which a patient, in relating his general complaint, can be induced to give an exceedingly comprehensive account of his psychosomatic difficulties.—*M. H. Erickson* (Eloise Hospital).

6221. **Erickson, M. H. An experimental investigation of the possible anti-social use of hypnosis.** *Psychiatry*, 1939, **2**, 391–414.—Reviewing the question of the misuse of hypnosis for anti-social purposes, the author emphasizes the difficulty of determining this possibility except by experimental investigations in which "the suggested anti-social act can really become an accomplished fact, obviously and unmistakably so, and without the protection afforded by a falsified situation which can serve only to vitiate or negate the experimental procedure for both the subject and the hypnotist." The author then reports a series of 35 experiments on a total of more than 50 subjects, calling for the participation by the subject in an undesirable performance directed against either himself or others. These experiments involved physical or mental injury, property offenses, the giving of adverse and intimate information, violation of moral codes, acceptance of complexes implying misdeeds, and the direct abuse of the subjects' confidence by the hypnotist. Inquiry is made into the subjects' post-experimental reactions and attitudes. From these experiments the author concludes that "hypnosis cannot be misused to induce hypnotized persons to commit actual wrongful acts either against themselves or others and that the only serious risk en-

countered in such attempts is incurred by the hypnotist in the form of condemnation, rejection and exposure."—*M. H. Erickson* (Eloise Hospital).

6222. **Erickson, M. H. Experimental demonstration of the psychopathology of everyday life.** *Psychoanal. Quart.*, 1939, **8**, 338–353.—This article gives an account of various experimental procedures in which a normal subject in a deep hypnotic trance was given suggestions serving to develop various psychological situations which would lead to demonstrations of: (1) unconscious determinants in the casual content of conversation, (2) manifestations of unconscious ambivalent feelings in conversation about a person, (3) lapsus linguae and unconscious irony, (4) unconscious resentment expressing itself in masked forms through a "smoke screen" of compensatory courtesy, (5) ambivalence—manifestations of unconscious conflict about smoking in the distortion of simple daily smoking habits, (6) unconscious convictions of absurdities with rationalization in support of the belief in them, (7) automatic writing—unconscious obliteration of visual impressions in order to preserve an hypnotically ordered amnesia, (8) crystal gazing—an hallucinatory vividness of dream imagery embodying anger displaced from the hypnotist to a dream person, (9) implantation of a complex, (10) the assumption of another's identity under hypnotic direction with a striking unconscious mimicry and the assumption of unconscious emotional attitudes.—*M. H. Erickson* (Eloise Hospital).

6223. **Fenichel, O. Über Trophäe und Triumph.** (Trophies and triumph.) *Int. Z. Psychoanal. Imago*, 1939, **24**, 258–280.—Trophies represent attempts to regain the power which the individual thought to possess in infancy but has since learned to concede to others. Thus the value of a trophy varies with the prestige of the person from whom it was obtained. Totemism and the gaining of self-respect are closely allied problems. The entire range of activities from cannibalism to mild homosexuality and from headhunting to collecting personal souvenirs should be considered in a study of the significance of trophies. Triumph is achieved through the super-ego or through identification with a group representing the qualities of the super-ego. It consists of a removal of fear and repressions through the acquisition of trophies, and is an expression of the assimilation of the former "have-nots" with the "haves." The sociological and political implications of this theory are emphasized.—*H. Beaumont* (Kentucky).

6224. **Fenichel, O. Problems of psychoanalytic technique, Part IV.** *Psychoanal. Quart.*, 1939, **8**, 303–324.—In this installment the author discusses in detail the problem of "working through" and related technical considerations. This working though is essentially a process that requires demonstrating to patients repeatedly and in various connections the applicability of an interpretation to manifestations of variants of the same instinctual or defensive behavior, since an interpretation may be understood in one context and not in another. Hence, aside from the ego's unwillingness to relinquish its resistances, most interpretations need to be repetitive in order to effect an understanding of an experience in all its aspects. The author summarizes his discussion in the statment that all interpretations, and most importantly transference interpretations, must be made repeatedly at every new resistance, so that excluded or repressed instinctual tendencies may catch up in development and be given the possibility of a discharge of previously dammed energies.—*M. H. Erickson* (Eloise Hospital).

6225. **Freud, S. Analyse terminée et analyse interminable.** (Terminated and interminable analyses.) *Rev. franç. Psychanal.*, 1939, **11**, 3–38.—Seemingly interminable analyses may be shortened by fixing a time limit, but there is a danger that they may then remain unfinished. In practice there can be little doubt as to the moment when an analysis is completed satisfactorily, but theoretical opinions on this matter vary widely. Optimists declare that it is possible to liquidate completely and permanently an instinctive conflict, to "vaccinate" a patient against any conflicts similar to the one for which he is being treated, and to prevent future pathogenic conflict whose presence has not betrayed itself. From this viewpoint very few analyses could be considered complete. Nor is it possible to demand that analysis should be continued until the patient is restored to the personality which he would "normally" have developed, because there is no way of determining the types of sublimation and other characteristic traits which he might have acquired in the absence of a conflict. Characteristic traits need not be forced to conform to "normal" patterns, nor the patient forever after be free from internal conflicts. When favorable psychological conditions for the functioning of the ego have been established, the task of analysis is done.—*H. Beaumont* (Kentucky).

6226. **Gerö, G. Zum Problem der oralen Fixierung.** (The problem of oral fixation.) *Int. Z. Psychoanal. Imago*, 1939, **24**, 239–257.—Oral fixation may result from an attempt to control oral sadism or oral libido, and lead to a restriction of erotic sensitivity. In men this often takes the form of apparent frigidity, while women appear unusually receptive and completely passive. In either case the relation between mother and child serves the patient as a model. Sex differences in the symptoms are based on fundamental differences in original drives, on social and educational influences, and on defense mechanisms of the sexes.—*H. Beaumont* (Kentucky).

6227. **Jung, C. G. Bewusstsein, Unbewusstes und Individuation.** (Consciousness, the unconscious, and individuation.) *Zbl. Psychother.*, 1939, **11**, 257–270.—Jung discusses the nature, characteristics, and expressions of the unconscious, its relation to consciousness, and the danger that it may overpower ego-consciousness. Normally the unconscious and consciousness cooperate smoothly, so that the unconscious appears non-existent, but when an

individual or group deviates too far from instinctual bases, the wrath of unconscious powers is aroused and they try to restore the balance. European ego-consciousness tends to engulf the unconscious, but each represents a unique aspect of life and should be allowed to follow its own course. This involves both strife and cooperation, and from the conflict develops individuation. It is an irrational life function, the transcendent union of opposites, from which arise new situations, expressed by definite symbols, similar to those of alchemy. Difficult analytic cases, especially educated patients with stationary transference, develop these symbols.—*M. E. Morse* (Baltimore).

6228. **Kennedy, J. L. Evidence for the recording error criticism of ESP data.** *Psychol. Bull.*, 1939, **36,** 501.—Abstract.

6229. **Klajn, H. Fehlleistung infolge unbewusster Todeswünsche gegen das einzige Kind.** (A mistake resulting from unconscious death wishes involving an only child.) *Int. Z. Psychoanal. Imago*, 1939, **24,** 333–338.—When a 28-year-old narcotic addict gained remission from an institution to which he had been repeatedly committed, his father wrote him that he would take care of him financially, but that his future was in his own hands. In response to his request for certain articles of clothing, his parents sent him everything on his list and, in addition, a gun. It developed that the father had taken this gun from his dresser drawer and hid it in his winter coat to keep it away from his son while he was home. The mother, who had searched the son's clothing for narcotics before sending them off, had included her husband's coat in the parcel, overlooking the gun. The father claimed to be sure that it was still in his dresser, while the mother maintained that she had given it to her husband to lock it away in his desk. No conscious responsibility for the "mistake" could be attributed to either parent.—*H. Beaumont* (Kentucky).

6230. **Margadant, S. V. Eine tiefenpsychologische Grundlage zur Klages'schen Graphologie.** (A "depth-psychological" foundation for Klages' graphology.) Amsterdam: Noord-Hollandsche Uitgeversmij, 1938.—A synthesis of Freud's, Adler's, and Jung's points of view regarding the subject matter indicated.—*R. C. Givler* (Tufts).

6231. **Meier, C. A. Spontanmanifestationen des kollektiven Unbewussten.** (Spontaneous manifestations of the collective unconscious.) *Zbl. Psychother.*, 1939, **11,** 284–303.—A case of ambulatory automatism with hypermnesia in a young woman. The leading motives were the labyrinth, the religious and ritual function of which Meier explains historically; and the initiation process of the dead. Every initiation is a preparation for death, usually not physical death but the end of the former stage of consciousness and a transformation of attitude.—*M. E. Morse* (Baltimore).

6232. **Miller, N. E. Experiments relating Freudian displacement to generalization of conditioning.** *Psychol. Bull.*, 1939, **36,** 516–517.—Abstract.

6233. **Mittelmann, B., & Wolff, H. G. Psychoanalysis and experimental methods.** *Psychol. Bull.*, 1939, **36,** 506.—Abstract.

6234. **Moritz, E. Materialismus gegen Logik und Complexe Psychologie.** (Materialism vs. logic and the psychology of complexes.) *Zbl. Psychother.*, 1939, **11,** 303–317.—A defense of Jung's psychology and method against Bumke's criticisms in *Psychoanalyse und ihre Kinder* (1938). Those who oppose the psychology of complexes unwittingly advance materialism and rationalism and discredit the great discovery of an Aryan spirit. Neither psychophysical causality nor psychophysical parallelism is tenable. The same applies to all attempts to present the two as irreconcilable opposites and to all monistic theories. Bumke does not distinguish between facts and hypotheses. Jung is an empiricist and interests himself in psychic phenomena as reality. His collective unconscious stands on demonstrable facts, and would still stand if his hypothesis were false. Irrational and non-physical phenomena can be treated rationally and scientifically.—*M. E. Morse* (Baltimore).

6235. **Pichon, E. La famille devant M. Lacan.** (Lacan's concept of the family.) *Rev. franç. Psychanal.*, 1939, **11,** 107–135.—Lacan's sociological concept of the family may be summarized in three theses: (1) the Western gamocentric civilization maintains itself precariously; (2) because it is so difficult to adjust to this type of civilization, neuroses are increasingly prevalent; (3) this in turn results in a decline of the father image, while woman produces a male protest which is the ultimate consequence of the Oedipus complex.—*H. Beaumont* (Kentucky).

6236. **Sterba, R. The significance of theatrical performance.** *Psychoanal. Quart.*, 1939, **8,** 335–337.—The author gives a brief account of the reaction of the audience to an amateur theatrical performance by fellow townsmen. He believes that the unconscious essence of dramatization is magic world creation equivalent in character to the play acting and magic world creation of children.—*M. H. Erickson* (Eloise Hospital).

6237. **Völgyesi, F. Menschen- und Tierhypnose. Mit Berücksichtigung der Stammes- und Einzelentwicklung des Gehirns.** (Human and animal hypnosis in relation to the phylo- and ontogenesis of the brain.) Zürich, Leipzig: O. Füssli, 1938. Pp. 230. RM. 5.10.—Völgyesi, a neurologist, gives a historical review of the development of animal hypnosis, with a chapter on "Pavlov and Hypnotism," and describes his own experiments with monkeys, lions, and bears. He explains the biological and physiological nature of hypnosis by the "vasomotor decerebration theory," in particular anemia of the frontal lobes. The boundaries between consciousness, concentration, hypnosis, and sleep are not sharp.—*M. E. Morse* (Baltimore).

6238. **Zilboorg, G. The discovery of the Oedipus complex.** *Psychoanal. Quart.*, 1939, **8,** 279–302.—The author presents a series of episodes from the life of Marcel Proust, giving an account of both the

man and his method of living and working. He offers an interpretation of that material as indicating both the influence of an Oedipus complex upon Proust and Proust's own knowledge and recognition of the psychological forces motivating him. This discovery was original in Proust and occurred in the same decade in which Freud first formulated the concept of the Oedipus complex.—*M. H. Erickson* (Eloise Hospital).

[See also abstracts 5981, 6063, 6296, 6314, 6529, 6548.]

FUNCTIONAL DISORDERS

6239. **Ackerman, N. W. Personality factors in neurodermite—a case study.** *Psychosom. Med.*, 1939, **1**, 366–375.—The life story of a juvenile patient afflicted with a chronic skin disorder involved pathological personality development, the dominant note of which was both self-hate and hatred of others.—*P. S. de Q. Cabot* (Simmons).

6240. **Benjamin, E., Hanselmann, H., Isserlin, M., Lutz, J., & Ronald, A. Lehrbuch der Psychopathologie des Kindesalters für Ärzte und Erzieher.** (A textbook of the psychopathology of childhood for physicians and teachers.) Erlenbach-Zürich: Rotapfel, 1938. Pp. 384. RM. 12.25.—Each collaborator is responsible for a separate section of the book. Feeble-mindedness and organic brain disorders, including epilepsy, are covered by Lutz; Isserlin discusses central brain lesions and their effects (deaf-mutism, aphasia, apraxia, motor disturbances); psychopathy and neuroses are taken up by Benjamin; Ronald contributes a chapter on neglect and criminality; and Hanselmann describes the pedagogical treatment of deficient and psychopathic children. An appendix includes the education of children with sensory defects.—*E. Benjamin* (Ebenhausen).

6241. **Berg, K. The sadist.** (Trans. by O. Illner & G. Godwin.) London: Acorn Press, 1938. Pp. 180. 15s.

6242. **Bleuler, M. Erblichkeit und Erbprognose: Schizophrenie, manisch-depressives Irresein, Epilepsie, Durchschnittsbevölkerung.** (Inheritability and prognosis for transmission: schizophrenia, manic-depressive psychosis, epilepsy, average population.) *Fortsch. Neurol. Psychiat.*, 1939, **11**, 287–302.—Recent publications on the inheritance of mental illnesses, primarily those listed above, are summarized briefly. Greatest space is given to studies of schizophrenic patients and their families, with special reference to the recent work of Kallman, who has studied over 1000 patients and over 13,000 people in all in his investigation. In contrast to studies made by families as to frequency of mental illness among normal and tainted groups, the work of Stroemgren, using the direct method of tabulating an entire community, is cited. The figures vary somewhat according to which method is used, because family studies include mentally ill relatives who have died, whereas the direct method includes only those alive on the day of counting. Bibliography.—*D. S. Oberlin* (Delaware State Hospital).

6243. **Borja, A. J. Historia e iconografía de un esquizofrénico.** (History and sketches of a schizophrenic.) *Rev. Neuropsiquiat.*, 1939, **2**, 228–245.—A case study of a male schizophrenic is presented which includes his pictorial description of animals and objects. The sketches are related to the life experiences of the patient and are viewed as symbolic manifestations.—*R. M. Bellows* (Maryland).

6244. **Branham, V. C., & Brooks, J. J. The psychiatric data punch card.** *J. crim. Psychopath.*, 1939, **1**, 34–58.—A psychiatric data punch card to be used with Hollerith statistical machines is suggested for facilitating hospital, prison, and similar surveys, and a model used by the authors is presented. The items include family history, personal history, medical, test, and other data. On the back of the card is an 11-trait psychograph covering the individual's personality. 3900 prison inmates have been studied by this method and the results are briefly discussed. 9 fairly well defined personality types are found.—*A. Chapanis* (Yale).

6245. **Brush, A. L. Recent literature relative to the psychiatric aspects of gastrointestinal disorders.** *Psychosom. Med.*, 1939, **1**, 423–428.—A review of recent literature concerning gastro-enterology indicates the importance of an early diagnosis and treatment of functional disorders of the gastrointestinal tract. Statistical studies reveal an increase in this particular type of psychosomatic illness. In evaluating psychiatric factors in illness emphasis should be on a study of the personality of the patient and of his methods of adaptation rather than on the environment itself.—*P. S. de Q. Cabot* (Simmons).

6246. **Cook, S. W. Some theoretical considerations relating to "experimental neurosis."** *Psychol. Bull.*, 1939, **36**, 516.—Abstract.

6247. **Dicks, H. V. Clinical studies in psychopathology.** Baltimore: Williams & Wilkins, 1939. Pp. 248. $4.75.—The chapters include: anxiety states; special forms of anxiety symptoms; phobias; obsessional states; hysteria; the play of opposites; some perversions of sexual aim; abnormalities in sexual function; drug addictions; general considerations. A number of case histories are quoted.—*R. R. Willoughby* (Brown).

6248. **Diethelm, O. An historical view of somatic treatment in psychiatry.** *Amer. J. Psychiat.*, 1939, **95**, 1165–1179.—*R. Goldman* (Boston Psychopathic Hospital).

6249. **Dimmick, F. L., Ludlow, N., & Whiteman, A. A study of "experimental neurosis" in cats.** *J. comp. Psychol.*, 1939, **28**, 39–43.—After cats had learned to lift the lid of a box to obtain food, they were required to open the box when a light-sound stimulus was being presented and to get the meat when this stimulus ceased. The task was later complicated by giving an electric shock if the box was opened at any time except during presentation of the stimulus or within 6 seconds after it had ceased.

It was not possible for the cats to avoid the shock, since the floor of their cage was electrified whenever an "incorrect" response occurred. Under these conditions all but one of 6 cats manifested "confusion" and "neuroticism." In late stages when the light and bell were presented *unaccompanied by shock*, the "cats would yowl, crouch in the far corner of the box, climb the side of the cage, bite and claw at the wire, urinate, and finally fall sprawling and panting on the floor of the cage." They also became "less friendly in their living quarters and one of them took to hiding in dark corners." Similar behavior was apparent upon repetition of the situation after a 10-day rest.—*N. L. Munn* (Vanderbilt).

6250. **Doll, E. A. Boarding-home care of mental defectives.** *Train. Sch. Bull.*, 1939, **36**, 35–40.

6251. **Dorcus, R. M., & Shaffer, G. W. Textbook of abnormal psychology.** (2nd ed.) Baltimore: Williams & Wilkins, 1939. Pp. xvii+475. $4.00.—A revision of the first edition, published in 1934 (see VIII: 2118) which involves the addition of some 90 pages and 150 references. "While the basic features of the original edition have been retained . . . the new material added, the great number of changes made in organization and presentation, and the elimination of earlier unavoidable errors make the new edition almost an entirely new book." Chapters on disorders of memory, theories of disorders of the central function, and chemical therapies have been added.—*D. Shakow* (Worcester State Hospital).

6252. **Dworking, S. Conditioning neuroses in dog and cat.** *Psychosom. Med.*, 1939, **1**, 388–396.—Under identical conditions (excepting freedom of locomotion) a cat and a dog were subjected to stimulus situations involving delicate discriminations of pitch and perceptions of sounds of liminal intensity, in which the nervous system was placed under strain. Results indicated that "it was the opportunity for occurrence of gross bodily movements that determined the character of the neurotic disturbance," thus tending to confirm the findings of Anderson and Liddell.—*P. S. de Q. Cabot* (Simmons).

6253. **Epstein, S. H., & Solomon, H. C. The effect of treatment on the mental level of patients with general paresis.** *Amer. J. Psychiat.*, 1939, **95**, 1181–1192.—Psychometric determinations (IQ) were used as a check on the results of treatment (fever and chemotherapy). On the whole, there is an increase in the intelligence quotients of patients after treatment, but "a number of patients showed a distinct lowering of their intelligence quotients after treatment."—*R. Goldman* (Boston Psychopathic Hospital).

6254. **Ferrero, M. L'esame psico-neurologico dell' anormale psichico nella scuola medico-pedagogica di Torino.** (The psycho-neurological examination of psychotics at the medical school of Turin.)—*Riv. Psicol. norm. pat.*, 1939, **35**, 95–108.—*T. M. Abel* (New York City).

6255. **Gesell, A. The early diagnosis of behavior defects and deviations.** *J. Conn. St. med. Soc.*, 1939, **3**.—Three types of behavior defect—mental deficiency, birth injuries, and specific disabilities—may be discovered in infancy by the use of standardized neuro-motor tests and the Yale norms of infant behavior. Potential reading disability may be diagnosed as early as 2 to 4 years of age. It is important, however, to exercise care in avoiding unqualified diagnosis of mental deficiency or grave defect.—*M. P. Montgomery* (Faribault, Minn.)

6256. **Goddard, H. H. Psychology of the status quo of exceptional children.** *Train. Sch. Bull.*, 1939, **36**, 52–54.—*E. M. Achilles* (Columbia).

6257. **Grotjahn, M. Psychiatric observations in a case of involutional melancholia treated with metrazol.** *Bull. Menninger Clin.*, 1939, **3**, 122–125.—A case of involutional melancholia with restlessness, anxiety, and negativism of 18 months' duration before the present hospitalization responded favorably to four metrazol treatments. The patient changed from a depressed, agitated, hostile person to a communicative, cooperative, kind woman. It is even possible that metrazol will afford better results in involutional melancholia than in schizophrenia.—*W. A. Varvel* (Kansas).

6258. **Hamvas, I. G. Die physiopathologischen Grundlagen der psychischen Veränderungen bei postencephalitischen Zuständen.** (The physiopathological bases of psychic changes in postencephalitic conditions.) Stetten/Basel: Schahl, 1939. Pp. 56.

6259. **Hansen, K., & Staa, H. v. Reflektorische und algetische Krankheitszeichen der inneren Organe.** (Reflex and algesic indications of disease of the internal organs.) Leipzig: Thieme, 1938. Pp. 270. RM. 26.—This book treats of the extraordinarily numerous nervous or "reflex" symptoms in visceral diseases—pain, reflex muscle contractions, vegetative reflexes of the vessels, hair, pupils, etc., and finally the organ reflexes. It includes methods of examination, clinical differential diagnosis, and the relevant anatomy and pathology. The conclusion is that in visceral diseases the symptoms always combine into an "obligate" syndrome, the organization of which is of the greatest importance for the differential diagnosis of the various organs. Exact observation and weighing of symptoms permits a diagnosis even without special technical aids. The book strives to revivify the natural means of diagnosis, often neglected in modern medicine, viz., sight, touch, observation, and judgment, which are at the disposal of every good physician.—*K. Hansen* (Lübeck).

6260. **Harms, E. Psychologie und Psychiatrie der Conversion.** (Psychology and psychiatry of conversion.) Leiden: Sijthoff's Uitgeversmaatschappij N. V., 1939. Pp. 120.—Conversion as here used includes religious conversion and all other profound shifts from one system of ideas or life to another—philosophic, political, economic, etc. These systems are shared by organized groups who strive to make converts and prevent backsliding. In conversion the individual may resist or shun former friends to escape reproaches and propaganda. Manic-depressive psychoses, phobias, schizophrenia, paranoid

phenomena, in fact all the common psychogenic psychoses, may originate in a conversion. Aversion to the old way of life is usually so strong that the attempt to effect a reconciliation merely reopens old wounds. Two ways of therapy are open: either to speed up the complete conversion to the system chosen by the patient and facilitate his orientation in the new social group, or to lead him into an entirely new world where he can escape or ignore the propaganda of both conflicting systems and find expression for some healthy unconflicted interest. In either case the treatment is not completed until the patient has found security in a new social group.—*M. F. Martin* (Northampton State Hospital).

6261. **Harms, E. "Mentally sane and sick" and the primitive man.** *In* Munksgaard, E., *Congr. int. Sci. anthrop. ethnol., Copenhague*, 1938. Copenhagen: Hoffenberg, 1939. P. 206.—Abstract.

6262. **Harshman, L. P. Orientations in mental deficiency.** *Proc. Ind. Acad. Sci.*, 1939, **48**, 183.—Abstract.

6263. **Hoskins, F. H. The broken string.** *Train. Sch. Bull.*, 1939, **36**, 41–48; 67–74.—A brief autobiography covering 30 years of the life of a birth-injured woman. Two factors should be considered by all handicapped persons: (1) some sort of philosophy of life which he must weave for himself from the materials within himself; (2) the development of a keen interest in many different things. A detailed account of the work at the Neurological Institute in New York City is given.—*E. M. Achilles* (Columbia).

6264. **Hulbert, H. S. Constitutional psychopathic inferiority in relation to delinquency.** *J. crim. Law Criminol.*, 1939, **30**, 3–21.—A non-technical paper describing types of constitutional psychopathic inferiority, read before the Association of State's Attorneys of Illinois.—*L. Ackerson* (Illinois Institute for Juvenile Research).

6265. **Kaplan, O. Life expectancy of low grade mental defectives.** *Psychol. Bull.*, 1939, **36**, 513.—Abstract.

6266. **Katz, B. The etiology of the deteriorating psychoses of adolescence and early adult life.** *Psychol. Bull.*, 1939, **36**, 513–514.—Abstract.

6267. **Knight, R. P. Psychotherapy in acute paranoid schizophrenia with successful outcome: a case report.** *Bull. Menninger Clin.*, 1939, **3**, 97–105.—The case of a 20-year-old male with acute paranoid schizophrenia involving delusions of marital infidelity is presented as a contribution to the literature of paranoid mechanisms and of short-time psychotherapy. Recent significant precipitating factors included a homosexual affair in which the patient had been the passive partner, marriage, and failure at heterosexual functioning. After 14 hours of psychotherapy the patient gained insight into the meaning of his delusions, and improved in heterosexual functioning and in self-regard. The outcome of the case is analyzed from the standpoint of its dynamics, the favorable reality factors, and the permanency of the result as shown in a follow-up report 5 years later.—*W. A. Varvel* (Kansas).

6268. **Kranefeldt, W. M. Zur Psychologie der Behandlung.** (The psychology of treatment.) *Zbl. Psychother.*, 1939, **11**, 270–284.—Life is unmethodical, and method may be a dangerous instrument for both doctor and patient. Every method is an instrument of power to force man into an artificial course, which is countered by "resistance." Even his purpose to cure is a power problem for the doctor. Nevertheless, method may serve practically as a shelter for a threatened soul, which, however, it outgrows as it gathers strength. But no method of deep psychology can reach into the depths of the true symbol, and this constitutes a great danger for the soul. Resigning the will power raises psychotherapy as method to therapeutic psychology, and "accident"—rightly interpreted—is the only unfailing guide. Kranefeldt illustrates dramatically (with diagrams) the situations of doctor and patient during analysis. The actors are Faust, the ego-consciousness, Mephisto, the corresponding ego center in the unconscious, the "shadow," and, separating them, Dr. Wagner, the personal unconscious.—*M. E. Morse* (Baltimore).

6269. **Kreezer, G. The relation of the electroencephalogram to intelligence level in the Mongolian type of mental deficiency: series 2.** *Psychol. Bull.*, 1939, **36**, 511–512.—Abstract.

6270. **Künkel, F. Grundzüge der praktischen Seelenheilkunde.** (Outlines of practical psychotherapy.) (3rd ed.) Stuttgart: Hippokrates Verl., 1939. Pp. 168. RM. 6.75.

6271. **Lutgens, H. Administrative conditions and problems of the California mental hospitals.** *Amer. J. Psychiat.*, 1939, **95**, 1103–1118.—*R. Goldman* (Boston Psychopathic Hospital).

6272. **Luxenburger, H. Psychiatrische Erblehre.** (A psychiatric study of heredity.) Munich: Lehmann, 1938. Pp. 134. RM. 3.50.—The author attempts to utilize the accepted scientific findings of genetics as a basis for eugenic measures as well as to indicate further problems for research. Personality and its pathological deviations are treated in detail as an introduction to the discussion of modern genetics, the genetic cycles of psychopathology, the hereditary organic nervous disorders, the hereditary background of non-hereditary psychoses, and the hereditary psychopathology of personality.—*H. Luxenburger* (Munich).

6273. **Macht, D. I., & Gessford, N. L. The unfortunate drug experiences of Dante Gabriel Rossetti.** *Bull. Inst. Hist. Med.*, 1938, **6**, 34–61.—The drug experiences of Rossetti include addiction to alcohol, chloral hydrate, and one experience with nux vomica. An addiction to the drug chloral is not a common occurrence, but a number of interesting cases have been recorded. The drug acts primarily on the higher divisions of the central nervous system and is particularly depressant for the vasomotor and respiratory centers of the medulla. Ex-

cerpts from Rossetti's biography and works are used to illustrate the personality changes due to his habitual use of chloral.—*R. M. Gagné* (Brown).

6274. **Maier, N. R. F. Further experiments on the neurotic pattern in rats.** *Psychol. Bull.*, 1939, **36,** 515–516.—Abstract.

6275. **Marshall, W., & Ferguson, J. H. Hereditary word-blindness as a defect of selective association.** *J. nerv. ment. Dis.*, 1939, **89,** 164–173.—A report is given of a case of hereditary word-blindness, with an account of the analysis of the case data and of the treatment from a point of view ("physiological") which regards speech learning as a special case of sensori-motor integration, and word-blindness as a defect in selective association at the "highest" level of the development of the integration of the sensori-motor act.—*R. C. Moore* (Boston Psychopathic Hospital).

6276. **Mateer, F. Differential syndromes in Stanford Binet failures.** *Psychol. Bull.*, 1939, **36,** 507–508.—Abstract.

6277. **Mayer, L. Die Psychotherapie des praktischen Ärztes.** (The psychotherapy of the practicing physician.) Munich, Berlin: J. F. Lehmanns Verl., 1939. Pp. 400. RM. 9.60; 10.80.—*P. L. Krieger* (Leipzig).

6278. **McCann, W. H. Responses of psychotic patients to the Thurstone personality schedule before and after metrazol treatment.** *Proc. Ind. Acad. Sci.*, 1939, **48,** 187–189.—Of 26 psychotic patients only 5 answered the schedule both before and after treatment. 12 took the test after but not before. "Judged by their reactions . . . 13 showed improvement, 5 remained unchanged, and 8 became definitely worse."—*C. M. Louttit* (Indiana).

6279. **Miles, C. C. A clinical and comparative study of hysterical psychopaths.** *Psychol. Bull.*, 1939, **36,** 515.—Abstract.

6280. **Morsier, G. de. La schizophrénie traumatique.** (Traumatic schizophrenia.) *Ann. méd.-psychol.*, 1939, **97,** Part 2, 1–12.—Three cases are presented of schizophrenia following head injury. The author does not think they are due merely to coincidence, because the heredity is much less tainted than is usual for schizophrenics. Some of the cases, also, including one reported here, have epileptic seizures, which are very rare in schizophrenics, so that both phenomena are attributed to the trauma. One of the cases reported had an extended period of habitual headache, vertigo, equilibrium, and memory disturbances following the trauma before the schizophrenic symptoms developed. Bibliography.—*M. B. Mitchell* (Mt. Pleasant State Hospital, Iowa).

6281. **Mowrer, O. H. Anxiety and learning.** *Psychol. Bull.*, 1939, **36,** 517–518.—Abstract.

6282. **Myerson, A. Theory and principles of the "total push" method in the treatment of chronic schizophrenia.** *Amer. J. Psychiat.*, 1939, **95,** 1197–1204.—It is claimed "that hospitalization of a patient under the circumstances of the care usually given produces a 'prison stupor' or a prison psychosis which interacts with the social retreat of the original schizophrenia." The patient becomes "immersed in monotony and perhaps, most importantly, he lives in a *motivation vacuum*." To overcome the psychologic and physiologic vacuums, the patient is stimulated and encouraged to participate in activities by the following techniques: physiotherapy, irradiation, exercise and games, diet change, praise, blame, reward, punishment, etc.—*R. Goldman* (Boston Psychopathic Hospital).

6283. **Naville, F., & Dubois-Ferrière, H. Étude sur l'exhibitionnisme.** (A study on exhibitionism.) *Schweiz. Arch. Neurol. Psychiat.*, 1938, **42,** No. 2.—The authors distinguish between true exhibitionism and a secondary kind which may accompany twilight states, epilepsy, various mental disturbances, hyposexual dysplasia, and oligophrenic states. In the latter division they include pseudo-exhibitionism. Dealing with the etiology of true exhibitionism, they believe that it depends upon a quantitatively augmented physiological sexual excitation and that this excess of stimulation determines the characteristic of impulsiveness, periodicity, etc., which is observed in this perverted tendency. Furthermore, they believe that the psychogenic factor, which is circumstantial and psychosexual in the Freudian sense, plays only a secondary role. They recommend as therapy a retraining based on a well-conducted sexual hygiene and psychotherapy. In refractory cases they recommend castration as a final remedy. The paper is written primarily from the point of view of legal medicine.—*M. Hareven* (Le Landeron).

6284. **Norton, C. D. The psychology of human adjustment.** *Ment. Hlth Observ.*, 1939, **6,** 1–6.—"Efficiency in adjustment depends in great degree on the ability of an individual to continue varying his responses until success is achieved. The mentally ill person is one who has lost this ability. The individual who can achieve his maximum of happiness, efficiency and usefulness with a minimum of strain and friction is mentally healthy."—*M. Keller* (Butler Hospital).

6285. **Persch, R. Über Gedankenzwang und automatisiertes Denken bei der Encephalitis lethargica.** (Compulsive thought and automatic thinking in encephalitis lethargica.) *Allg. Z. Psychiat.*, 1939, **110,** 316–324.—*P. L. Krieger* (Leipzig).

6286. **Philp, A. J. An approach to the mental organization of the feeble-minded.** *Psychol. Bull.*, 1939, **36,** 507.—Abstract.

6287. **Rahman, L., Richardson, H. B., & Ripley, H. S. Anorexia nervosa with psychiatric observations.** *Psychosom. Med.*, 1939, **1,** 335–365.—A presentation of 12 case studies of female patients with a symptom complex of anorexia nervosa. Data included physical and psychiatric observations. All patients exhibited psychoneurotic characteristics associated with endocrine deficiency at or near puberty. Gastrointestinal symptoms appeared in all cases. It was not clear whether the neurosis or the endocrine defect was primary. Obsessive, compulsive, and depressive features were prominent,

and generally normal sexual relationships were avoided. Endocrine therapy was not found to be definitely valuable. A regulated regime with firmness and flexibility should be instituted and a study made of the dynamic factors in the personality.—*P. S. de Q. Cabot* (Simmons).

6288. **Rowland, H. Friendship patterns in the state mental hospital.** *Psychiatry*, 1939, **2**, 363–373.—A sociological study is made of the friendship patterns between patient and patient, between employee and employee, and between employee and patient, as an approach to the social life of the mental hospital to determine the community nature of this type of segregative institution. Illustrative material is given to portray the various types of friendships, their significances and effects, and the lines of social division. The author concludes that the mental hospital has a social system of definite structure and with many complex social processes. He emphasizes the significant value of the mental hospital as a laboratory for research into social relationships.—*M. H. Erickson* (Eloise Hospital).

6289. **Sala, J. R. Homesickness, a mental hygiene problem.** *Ment. Hlth Observ.*, 1939, **6**, 17–20.

6290. **Sharp, A. A. A statistical analysis of the validity of the Babcock test of mental deterioration.** *Psychol. Bull.*, 1939, **36**, 508.—Abstract.

6291. **Skalweit, W. Schizophrenie.** (Schizophrenia.) *Fortschr. Neurol. Psychiat.*, 1939, **11**, 331–349.—The recent articles in the field follow closely trends already established in the study of techniques, somatic and physiopathological states, etc., so that the author confines the present article to studies of schizophrenia which are primarily clinical. The investigation of Langfeldt, "The prognosis of schizophrenia and the factors influencing the course of the disease," is discussed at length. Other contributions on such subjects as the use of the Rorschach test, insulin and other shock therapy, and the relation of epilepsy and tuberculosis to schizophrenia are also considered. Bibliography.—*D. S. Oberlin* (Delaware State Hospital).

6292. **Soulairac, A., & Suttel, R. De l'antagonisme du bien et du mal dans quelques délires.** (Antagonism between the good and the bad in some delusions.) *Ann. méd.-psychol.*, 1939, **97**, Part 2, 13–36.—Several patients with persecutory delusions, melancholia, and paranoid delusions are described as suffering from a conflict between good and bad.—*M. B. Mitchell* (Mt. Pleasant State Hospital, Iowa).

6293. **Speer, E. Vom Wesen der Neurose und von ihren Erscheinungsformen.** (The nature and manifestations of neurosis.) Leipzig: G. Thieme, 1938. Pp. 122. RM. 3.60.—Speer distinguishes sharply between clinical pictures in which neurosis is only a consequence of degeneration, not a determining characteristic, and the pure neuroses, which he ascribes to deficient elaboration of experience. Neurosis is not only a "false attitude," but also one of sparing and recuperation. This theory of the nature of neurosis is arrived at equally convincingly from study of a segment of human history. The second part of the book gives clinical pictures of the neuroses, including a comprehensive presentation of the theory of obsessive neuroses and chapters on addiction, adolescent crises, and the so-called organ neuroses. The entire book emphasizes the necessitous condition of the personality and the social aspect of the neuroses. Psychotherapy is intentionally almost entirely omitted.—*E. Speer* (Lindau).

6294. **Steinmetz, H. C. Selection for and contagion of paranoia in organized groups.** *Psychol. Bull.*, 1939, **36**, 532.—Abstract.

6295. **Stringaris, M. G. Die Haschischsucht. Psychopathologie, Klinik, Soziologie, Kriminologie.** (Hashish addiction; psychopathology, clinical observations, sociology, criminology.) Berlin: J. Springer, 1939. Pp. 100. RM. 12.

6296. **Van der Hoop, J. H. Conscious orientation: a study of personality types in relation to neurosis and psychosis.** (Trans. by Laura Hutton.) New York: Harcourt, Brace, 1939. Pp. x+352. $4.00.—Beginning with 6 lectures (Part I), originally given at the Psychopathic Hospital in Boston, which describe the author's types of conscious orientation (i.e. "sets" which determine conscious organization of experience), the book goes on (Part II) to apply these theoretical and psychological formulations to the problems of neurosis and psychosis, and (Part III) to present a philosophical commentary concerning the objective basis of psychology, the unity and transcendence of consciousness, and the personal equation. The author's typology takes its departure from Jung's and is an attempt to synthesize the influences of Jung and Freud upon his thinking.—*J. McV. Hunt* (Brown).

6297. **Vidoni, G. I giovani anormali psichici e la loro famiglia.** (Young psychopaths and their families.) *Riv. Psicol. norm. pat.*, 1939, **35**, 68–94.—A statistical study was made of young psychopaths at Genoa. The investigation included hereditary, mental, psychiatric, social, and delinquency factors.—*T. M. Abel* (New York City).

6298. **Wallin, J. E. W. Minor mental maladjustments in normal people: based on original autobiographies of personality maladjustments.** Durham, N. C.: Duke Univ. Press, 1939. Pp. vi+298. $3.00.—This book contains 293 autobiographies obtained from individuals who were members of the author's classes; these were obtained by requesting from the students "an inventory of early difficulties of adjustment, together with suggestions as to processes of adjustment." After a chapter on the purpose and nature of the investigation and a list of questions for students who study the autobiographies, the latter are presented under 19 chapter headings. Each chapter contains a statement by the author, a list of references to books on theory, and the portions of the autobiographies which fall under the particular heading. The chapter devoted to fears and phobias is significantly larger than any of the others (74

pages as compared to 18 pages for the next largest). —*J. McV. Hunt* (Brown).

6299. **Wittman, M. P. Developmental characteristics and personalities of chronic alcoholics.** *J. abnorm. soc. Psychol.*, 1939, **34**, 361–377.—Chronic alcoholics are not a definitely homogeneous group; a comparison of the differences of the alcoholics' self-estimates indicates that no one particular factor is characteristic of the entire group. The following developmental factors and personality traits differentiate the chronic alcoholics from the control group used: a domineering but idealized mother and a stern, autocratic father whom the subject feared somewhat as a child; a marked degree of strict, unquestioning obedience demanded in family life, with little latitude and freedom allowed; a feeling of insecurity as evidenced by an insistent feeling of need for religious security and a strong feeling of sin and guilt; marked interest in the opposite sex, with many love affairs but poor marital adjustment; lack of self-consciousness, together with a marked ability to get along with and be socially acceptable to others; a keyed-up emotional level, resulting in work done under high tension; a definitely expressed and disproportionately greater love for the maternal parent than for the paternal. Divisions under which the alcoholics classify as poorly adjusted are concerned primarily with inner adjustments rather than adjustments to environment.—*C. H. Johnson* (Portland, Ore.).

6300. **Wittman, M. P. Mental efficiency levels before and after shock therapy.** *Psychol. Bull.*, 1939, **36**, 514–515.—Abstract.

6301. **Worchel, P. Insulin shock on schizophrenic patients: psychometric results and progress notes.** *Psychosom. Med.*, 1939, **1**, 434–437.—18 white male patients aged 16–32 were interviewed and tested with the Stanford-Binet before and after insulin shock therapy. Tentative observations were: schizophrenia affects certain intellectual functions in the direction of deterioration, although it is uncertain whether this is organic or psychological in origin; compared with normal individuals the amount of scatter is insignificant.—*P. S. de Q. Cabot* (Simmons).

6302. **Yates, D. H. An association-set method in psychotherapy.** *Psychol. Bull.*, 1939, **36**, 506.—Abstract.

6303. **Zilboorg, G. Misconceptions of legal insanity.** *Amer. J. Orthopsychiat.*, 1939, **9**, 540–554.—The expression "legal insanity" has been accepted as denoting a specific condition the existence of which is not questioned and the meaning of which is casually taken for granted. The history of the concept shows that medicine was asked to accept the term as an immutable judicial credo. Not only do traditional jurists present extreme opposition to psychiatry, but a number of medical men follow the dangerous double standard of clinical judgment by accepting the existence of two insanities, legal and medical. The law will not be changed in the near future; therefore psychiatrists can perform the greatest service by presenting the facts that they know to the courts and not entering into any discussion of responsibility or legal insanity. The question asked by the courts is always in terms of the word "know": Did the defendant know the nature of the act and that it was wrong? The psychiatrist must insist that he cannot take the word "know" for granted and must carry his strict clinical standard direct to the witness stand.—*R. E. Perl* (New York City).

6304. **Ziskind, E., & Somerfeld-Ziskind, E. The inadequacy of the evidence for hereditary predisposition in epilepsy.** *Amer. J. Psychiat.*, 1939, **95**, 1143–1163.—The major evidence favoring an hereditary predisposition in epilepsy is reviewed. Existing evidence is called in question on the grounds of statistical accuracy and choice of controls, i.e., validity of method. "It is definitely stipulated that the entire discussion herein of the evidence for an hereditary predisposition is not proof of the absence of such a factor. The contention is fostered that the present day evidence is inadequate to establish heredity as a significant contributing etiologic element."—*R. Goldman* (Boston Psychopathic Hospital).

[See also abstracts 5982, 5993, 6026, 6036, 6140, 6149, 6206, 6307, 6312, 6316, 6319, 6398, 6412, 6417, 6450, 6465, 6483, 6491, 6494, 6501, 6525, 6527, 6533, 6539, 6552.]

PERSONALITY AND CHARACTER

6305. **Adams, D. K. Age, race and responsiveness of levels of aspiration to success and failure.** *Psychol. Bull.*, 1939, **36**, 573.—Abstract.

6306. **[Anon.] I am physically handicapped.** *Parents' Mag.*, 1939, **14**, 30, 99–100.—A girl crippled by infantile paralysis at the age of 3 was able to make a normal adjustment to life only when she ceased struggling to behave and be treated as a "normal" person.—*M. P. Montgomery* (Faribault, Minn.).

6307. **Benon, R. Ennui et concupiscences. Ennui et asthénie.** (Ennui and sexual lust. Ennui and asthenia.) *Ann. méd.-psychol.*, 1939, **97**, Part 2, 224–235.—Ennui is a malady of the intellect and of activity. It is the mental and emotional state in which a person who previously had a great many desires no longer has any. He is without interest. This may be the result of either too many impossible and, therefore, frustrated desires, or the result of the satisfaction of all desires. A person with strong sexual desires may suffer ennui after indulging in the usual forms of sexual practice and turn to the less usual forms to find only temporary relief from ennui. Senancour's "Obermann" is described as a literary example of ennui. Asthenia is never more than episodic in ennui.—*M. B. Mitchell* (Mt. Pleasant State Hospital, Iowa).

6308. **Bourdel, L. Contribution à l'étude du caractère.** (Contribution to the study of character.) *Z. Kinderpsychiat.*, 1939, **6**, 38–49.—A report of first results obtained from a test of tastes and interests—

the catalogue test. The test (a slight revision of one originally devised by Tramer) consists of the titles of 400 children's books which fall into 20 categories. The child is asked to select 10 of the titles which he would like to have as a gift. He is told that he will actually receive one of the 10 on some approaching holiday. Detailed reports of the responses by several subjects and tables comparing boys and girls and men and women are given.—*D. Shakow* (Worcester State Hospital).

6309. **Doob, L. W., & Sears, R. R. Factors determining substitute behavior and the overt expression of aggression.** *J. abnorm. soc. Psychol.*, 1939, **34**, 293–313.—Four hypotheses bearing on factors determining substitute behavior and degree of overt aggression have been deduced from the general laws of frustration and of learning, and evidence gathered from a questionnaire designed to permit standardized recall of real-life situations has been presented to substantiate them. Several generalizations may be made: The frequency of substitute responses varies positively with the strength of anticipatory responses to punishment-for-being-aggressive. The frequency of substitute responses varies inversely with the strength of instigation to the frustrated goal response. Overtness of aggression varies inversely with the amount of punishment anticipated as a consequence of such behavior. Overtness of aggression varies positively with the strength of instigation to the frustrated goal response. Overt aggression is more satisfying than non-overt aggression or substitute responses in the sample frustrating situations used in this study.—*C. H. Johnson* (Portland, Ore.).

6310. **Gardner, J. W. The relation of certain personality variables to level of aspiration.** *Psychol. Bull.*, 1939, **36**, 540.—Abstract.

6311. **Geiger, H. E. Measuring affective experience.** *Proc. Ind. Acad. Sci.*, 1939, **48**, 190–192.—Preliminary report of an experiment to measure the values of crucial words in attitude scale statements.—*C. M. Louttit* (Indiana).

6312. **Hathaway, S. R. The direction of sex interest in cases of genital dysplasia.** *Psychol. Rec.*, 1939, **3**, 155–164.—The Terman-Miles attitude-interest analysis test was used to compare the masculinity-femininity scores of 9 patients whose physical developmental defects of the genitalia ranged from minor hypoplasia to pseudohermaphroditism. Short case studies are given. Results indicate a relative independence between genital development and personality characteristics as measured by the masculinity-femininity interest scale.—*P. S. de Q. Cabot* (Simmons).

6313. **Hertzman, M., & Gould, R. The functional significance of changed responses in a psychoneurotic inventory.** *J. abnorm. soc. Psychol.*, 1939, **34**, 336–350.—An inventory composed of 42 items selected from the original Woodworth personal data sheet on the basis of their discriminatory power was given to 147 women students. A retest was given 4 weeks later. Significant correlations were found between: the changed responses and the frequency of unfavorable responses; the changed responses and those items which were answered in the unfavorable direction at each testing (same scores); the changed responses and the critical ratios between the extremes of the subjects; the frequency of neurotic response and the critical ratio. From these results it was concluded that analyses of the frequency with which responses were changed in answering a psychoneurotic inventory must take into consideration the frequency with which there were neurotic answers to the items. An analysis of the items showed that the responses were changed most frequently to those items which used the word "often" in connection with a symptom and which made no statement concerning the number of times the symptom had been experienced by the subject.—*C. H. Johnson* (Portland, Ore.).

6314. **Hitschmann, E. Selma Lagerlöf, ihr Wesen und ihr Werk.** (Selma Lagerlöf, the person and her work.) *Int. Z. Psychoanal. Imago*, 1939, **24**, 304–332.—A strongly developed ego permitted Selma Lagerlöf to overcome the impending difficulties in her development. Neglect on the part of Nature and her own mother did not result in resentment and envy, but she discovered a way to excel others and developed a noble personality, elevated above the general human level. Selecting mental production as her outlet, she achieved prestige and fame due to her outstanding ability. The dynamic factors of the unconscious must be recognized as the real motivating forces responsible for her development as an individual and a poet.—*H. Beaumont* (Kentucky).

6315. **Humm, D. G. Dysinger's critique of the Humm-Wadsworth temperament scale.** *J. abnorm. soc. Psychol.*, 1939, **34**, 402–403.—Contains clarifications of some of the questions raised by Dysinger, and raises, in turn, some questions regarding the correlation methods used by Dysinger in his retest of the reliability of each component of the scale.—*C. H. Johnson* (Portland, Ore.).

6316. **Keller, F. Eitelkeit und Wahn.** (Vanity and delusion.) Bern: Francke, 1938. Pp. 75. Frs. 3.50.—Vanity differs from pride and conceit in its need for recognition, and from ambition, domineering spirit, stubbornness, and selfishness in its illusory satisfactions. Delusions of grandeur represent pathological conceit or pathological vanity, while delusions of persecution involve an exaggerated conception of one's power as well as vanity. This relationship is indicated by the frequency with which both delusions are found together. The cause of vanity and delusions lies in an affectivity which is either too labile or too rigid, and in most cases too superficial. A narcissistic attitude is due to lack of contacts with others, and causes feelings of inferiority more often than it is the result of them. Love for others means negation of self, and eliminates positive and negative feelings of one's own worth, together with delusions of grandeur and of persecution.—*F. Keller* (Solothurn).

6317. **Klopfer, B., Krugman, M., Kelley, D. M., Murphy, L., & Shakow, D. Shall the Rorschach method be standardized?** *Amer. J. Orthopsychiat.*, 1939, **9**, 514–529.—This is a round-table discussion on the advisability of standardizing the scoring of the Rorschach test. The writers seem to agree that any rigid psychometric standardization would interfere with the growth and value of the method.—*R. E. Perl* (New York City).

6318. **Lewis, A. A. Looking for an honest man.** *Sci. Mon., N. Y.*, 1939, **49**, 267–275.—The new Diogenes, in looking for an "honest man," is perfecting and using new techniques—the lie detector, the biographical approach, and character tests with their statistical accompaniments.—*O. P. Lester* (Buffalo).

6319. **Menninger, K. A. Somatic correlations with the unconscious repudiation of femininity in women.** *Bull. Menninger Clinic*, 1939, **3**, 106–121; *J. nerv. ment. Dis.*, 1939, **89**, 514–527.—The author discusses some of the ways in which one aspect of self-destructiveness, the unconscious repudiation of femininity, might be expected to appear in bodily function and structure. Notice is taken of such phenomena as the masculine physical characteristics of some overtly homosexual women, the unattractive angularity of certain neurotic spinsters, changes toward greater femininity correlated with successful psychotherapy, frigidity, vaginismus, hyperemesis gravidarum, and disorders of menstruation. Rejection of the feminine role is dependent upon deeplying hostility directed outwardly against men and inwardly against the feminine part of themselves by reason of which they feel so inferior.—*W. A. Varvel* (Kansas).

6320. **Niceforo, A. L'"io" allo specchio. Contributo allo studio delle autogiustificazioni e delle pseudo-rimorso.** (The ego before the mirror. A contribution to the study of self-justification and pseudo-remorse.) *Riv. Psicol. norm. pat.*, 1939, **35**, 1–46.—The author discusses the various "personalities" that comprise the ego.—*T. M. Abel* (New York City).

6321. **Pallister, H., & Pierce, W. O'D. A comparison of Bell adjustment scores for American and Scottish groups.** *Sociometry*, 1939, **2**, No. 3, 54–72.—A detailed statistical analysis is offered of the results of the administration of the Bell adjustment inventory to groups of school-leavers and to unemployed and employed young workers in a Scottish industrial area, as compared with those obtained by Bell for American groups. Contrary to the expectations of British psychologists, there was no difficulty in securing cooperation from the Scottish subjects. The Scottish unemployed groups were significantly inferior to the employed groups on the home, health, and emotional scales, but not on the social scale; this may be because of the widespread acceptance of unemployment in this area. The male groups showed better adjustment on the emotional scale than did the female groups; there was a tendency to better adjustment in the younger groups. The Scottish groups showed better home and health adjustment and poorer social adjustment than the American groups. The Scottish group fails to show the American tendency toward an increase in adjustment with age. The findings for the comparable American and Scottish college male groups are similar except for the significantly better health adjustment and poorer social adjustment of the Scottish college men. Other findings are summarized and there is a tabular presentation of the data for all the groups studied.—*L. J. Stone* (Vassar).

6322. **Pillsbury, W. B. Body form and introversion-extroversion.** *J. abnorm. soc. Psychol.*, 1939, **34**, 400–401.—No method of treating the results from 274 students showed any relationship between body form as measured by the Pignet index and introversion or extroversion as measured by the Guilford questionnaire.—*C. H. Johnson* (Portland, Ore.).

6323. **Robertson, A. E., & Stromberg, E. L. The agreement between associates' ratings and self-ratings of personality.** *Sch. & Soc.*, 1939, **50**, 126–127.—Contrary to the general conclusion that self-ratings result in overestimation of desirable characteristics, an experiment comparing ratings on the Roger self-rating test by self and by best friends of college upper-class women showed no consistent tendency for the group as a whole.—*M. Lee* (Chicago).

6324. **Van Tuyl, M. C. An application of the life history method.** *Psychol. Bull.*, 1939, **36**, 547.—Abstract.

6325. **Waals, H. G. v. d. Über die Beziehungen zwischen dem Associationsexperiment nach Jung und der Psychodiagnostik nach Rorschach.** (The relationship between the Jung association method and the Rorschach psychological diagnosis.) *Schweiz. Arch. Neurol. Psychiat.*, 1938, **42**, No. 2.—The author distinguishes between the two methods in the sense that the Jung association experiments emphasize the subject's complexes, while the Rorschach method gives us his reaction type (*Erlebnistypus*). However, both methods aid us in recognizing the subject's affectivity. The author draws a parallel between the results obtained by the two methods and shows how they are mutually helpful, in that an agreement between their results often determines the direction of the diagnosis. Thus in cases where the Jung method indicates a faulty affectivity by the presence of a predominance of predicative and inner associations, the Rorschach method will generally indicate an unfortunate reaction type, while in cases where the Rorschach method reveals a favorable reaction type, the Jung method will find external and motor linguistic associations. Tables and graphs based on experimental case studies are included.—*M. Hareven* (Le Landeron).

[See also abstracts 5999, 6156, 6176, 6191, 6206, 6217, 6239, 6260, 6278, 6296, 6365, 6399, 6410, 6415, 6420, 6425, 6499, 6526, 6541, 6549, 6557.]

GENERAL SOCIAL PROCESSES

(incl. Esthetics)

6326. **Allport, F. H. The construction and use of a telic scale for measuring war-producing behaviors of citizens.** *Psychol. Bull.*, 1939, **36**, 555–556.—Abstract.

6327. **Alpert, H. Emile Durkheim and sociologismic psychology.** *Amer. J. Sociol.*, 1939, **45**, 64–70.—Durkheim and co-workers on the *Année Sociologique* have urged that, since man is a social and cultural product and since society provides the necessary conditions of personality development and expression, psychology must be made a sociologically conscious discipline. Society creates in the individual the self-control, attention, and effort necessary for sustained action and hence expression. It also provides man with his values, ideals, standards, and sympathies. Therefore a comprehensive human psychology must include a sociology of values, of thought and knowledge, of mental states, of emotions, of language, etc. These studies, termed "sociologismic," involve three dangers: (1) the tendency to ignore the biological basis of human nature and to reduce the individual to an automaton impassively receiving and conforming to a social heritage; (2) the tendency to invent psychological principles *ad hoc* or to adopt implicitly some outmoded psychological system; and (3) the tendency to hypostatize society and social forces. Durkheimians have not altogether avoided these pitfalls, but Durkheim is among the most cautious of them. He and his disciples have given affirmative evidence of the fruitfulness of studying what Delacroix has termed the "social dimension" of psychical data.—*D. L. Glick* (Brown).

6328. **Anderson, V. A. The auditory memory span for speech sounds.** *Speech Monogr.*, 1938, **5**, 115–129.—Two tests of auditory memory span using speech sounds were devised, one employing consonants and the other vowels. Average scores were found to be lower than those reported for memory span for digits. The auditory span for vowels was the more reliable, and was independent of phonetic training or foreign language environment, and likewise unrelated to pitch discrimination or auditory acuity. A moderate correlation was found with general intelligence, school grades, and English usage.—*W. H. Wilke* (New York University).

6329. **Bayer, K. Experimentelle Untersuchung über die Schreibzeit und den Schreibdruck.** (Experimental investigation of duration and pressure in writing.) Würzburg: Mayr, 1939. Pp. 102.

6330. **Benedict, R. Sex in primitive society.** *Amer. J. Orthopsychiat.*, 1939, **9**, 570–574.—Sex offenses are not solely medical problems but also social ones. In all cultures where sex offenses are rare, the adult is provided with a respected role in his society. Sex taboos are not necessarily associated with sex offenses, for if the taboos are in the service of accepted social goals and thus minister to an individual's self-respect, such sexual restrictions do not pile up aggression. "Deprivations, humiliations, discrimination against minority groups, all take their toll in that a certain proportion of people will take up asocial or unorthodox ways of life *faute de mieux*."—*R. E. Perl* (New York City).

6331. **Berry, M. F. A study of the medical history of stuttering children.** *Speech Monogr.*, 1939, **5**, 97–114.—The study is based on case histories of 430 stutterers and of 462 children in a control group. A comparison was made of the diseases suffered by the stutterers prior to the onset of stuttering (which was at 4.86 years, on the average) and the diseases in the control group contracted up to the fifth year. The data show that acute infectious diseases of the respiratory system and certain diseases of the nervous system—encephalitis, convulsions, and epilepsy—occur more frequently in the records of the stuttering children. Such diseases as measles, rickets, otitis media, indigestion, eczema, etc., occur about equally frequently in both groups. Hypotheses to account for the apparent association of stuttering with certain diseases are considered.—*W. H. Wilke* (New York University).

6332. **Black, J. W. Vowel quality before and after an operation for an occluded nasal passage.** *Speech Monogr.*, 1939, **5**, 62–64.—Acoustic spectra of three vowels spoken by the same subject before and after an operation for an occluded nasal passage showed no effect upon the 2500–3000 cycle band of frequencies. It has been supposed that the absence of this usually characteristic band was due to the occluded passage. The data confirm an earlier observation that the characteristics of the vowel are stable for a given person.—*W. H. Wilke* (New York University).

6333. **Bloomfield, L. Linguistic aspects of science.** *Int. Encyl. unified Sci.*, 1939, **1**, No. 4. Pp. viii+59. $1.00.—An introduction sets forth basic linguistic viewpoints and definitions. The second section discusses the function of language (defined as vocal speech) in human social interaction. Section 3 describes, with definitions, the structure of language, and Section 4 the problems pertaining to meaning and precision. Section 5, on scientific language, forms the principal contribution of the monograph, and suggests the principal safeguards which must be observed in scientific discourse. There is a summary section, a bibliography of 35 items, and an index of technical terms.—*R. R. Willoughby* (Brown).

6334. **Boisen, A. T. Religion and hard times.** *Soc. Action*, 1939, **5**, No. 3, 8–35.—This article is a "study of the Holy Rollers," a factual and interpretative characterization of the various Pentacostal sects, which have become relatively numerous in the past decade. In general, the groups are composed of individuals of the working classes hardest hit by the economic crises; they are predominantly youthful. Doctrinally the groups are rigidly fundamentalistic, yet they are anything but conservative in spirit. The theme is mystical individual redemption, with utter disregard of social betterment. Criticizing certain aspects of their beliefs, the writer

yet finds several desirable characteristics: "the demand for action and participation, the demand for reality and earnestness, the demand for warmth of fellowship, and the demand for help in the vital problems of life."—*F. W. Finger* (Brown).

6335. **Bower, W. C. Points of tension between progressive religious education and current theological trends.** *Relig. Educ.*, 1939, **34**, 164–172.—Conflicting conceptions and the consequent tensions between progressive religious education and current regressive theological trends are discussed. The sources of tension here considered are: (1) the conflicting conceptions of the nature and structure of reality, (2) the role of creativity, emphasized by progressive religious education, and tradition, emphasized by reaction, (3) the area of social action, and (4) the relation of religion. A discussion of the paper follows.—*F. A. Mote, Jr.* (Brown).

6336. **Bracken, H. v. Das Schreibtempo von Zwillingen und die sozialpsychologischen Fehlerquellen der Zwillingsforschung.** (The writing tempo of twins and the socio-psychological sources of error in twin research.) *Z. mensch. Vererb.- u. Konst-Lehre*, 1939, **23**, 278–298.—The study deals with 38 sets of twins from 7 to 41 years of age. They were to write a sentence first at their customary tempo, then as rapidly as possible. The average intrageminal deviation of the identical twins was much less than that of the fraternal twins—evidence of hereditary influence. The differences between the writing tempi of the two members of the sets of twins and the difference in their reactions in a competitive test between these two members reveal two sociopsychological sources of error involved in previous research studies in this field. It seems evident that writing tempo is determined to a much greater extent by hereditary influences than earlier studies would indicate.—*S. W. Downs* (Berkeley, Calif.).

6337. **Brighouse, G. The effects of protracted observation of a painting.** *Psychol. Bull.*, 1939, **36**, 552.—Abstract.

6338. **Bruce, R. H. A summary of four years' work on the social behavior of albino rats.** *Psychol. Bull.*, 1939, **36**, 656.—Abstract.

6339. **Caillet, E. Mysticisme et "mentalité mystique."** (Mysticism and "mystical mentality.") Paris: Alcan, 1938. Pp. 195.—A theologian seeks to refute Lévy-Bruhl's theory that mystical experience is peculiar to a primitive form of mentality. For the author Lévy-Bruhl's thesis places religion in the false light of being a product of a retarded mentality. The fact that religious experience is irrational does not prove that it is a product of lower mentality. One may just as well, if not better, argue that it is a product of a higher sort of mentality, namely intuition which seeks to arrive at the deeper reality of things.—*F. C. Summer* (Howard).

6340. **Carhart, R. Infra-glottal resonance and a cushion-pipe.** *Speech Monogr.*, 1939, **5**, 65–96.—To determine whether the air column in the bronchial tree acts as a resonator which affects vocal sound, the behavior of an artificial larynx was studied. The device included a resonator tube of variable length below the vibrator formed by two rubber membrane balloons. Some "infra-glottal" tube lengths were found to inhibit the cushion-pipe. The behavior of the system was studied for various conditions, such as with the cushions uninflated, partially inflated, and inflated, for different widths of the glottal chink, etc. "The present findings do not answer any questions regarding the living vocal mechanism."—*W. H. Wilke* (New York University).

6341. **Child, I. L. A field study of psychological aspects of acculturation.** *Psychol. Bull.*, 1939, **36**, 556.—Abstract.

6342. **Cummings, S. B., Jr. The "kid-friend" relationship: some observations on the dynamics of social interaction.** *Psychol. Bull.*, 1939, **36**, 538.—Abstract.

6343. **Dollard, J. Culture, society, impulse, and socialization.** *Amer. J. Sociol.*, 1939, **45**, 50–63.—Uses and limits of the terms "culture" and "society" are discussed. The society idea points at the individual in associated life and not merely at his abstracted habitual outfit. Some conception of impulse is necessary to an effective social psychology; the movement away from instinctivist views has overlooked this fact. Crucial but much neglected is the socialization conception. No one knows in detail how children grow up in our or any other society. Hypothetical examples and fragmentary observations are not a sufficient basis for a theory of human learning; minute studies will have to be made which are specifically oriented from the societal and impulse standpoints.—*D. L. Glick* (Brown).

6344. **Dudley, H. The automatic synthesis of speech.** *Proc. Nat. Acad. Sci., Wash.*, 1939, **25**, 377–383.—The sound of a simple sentence is analyzed into a fundamental frequency and various spectral variations of amplitude. Two basic energy sources provide power which passes through modulators to produce spectra exactly equivalent to those produced in the analyzer. These are then combined to produce the synthesized speech. Applications of this procedure are discussed.—*D. E. Smith* (Alberta).

6345. **Farnsworth, P. R. The Adlerian principle in the arts.** *Psychol. Bull.*, 1939, **36**, 552–553.—Abstract.

6346. **Farnsworth, P. R. Musical eminence.** *Sch. & Soc.*, 1939, **50**, 158–160.—Cattell used a shis criterion of eminence the amount of space devoted to an individual in the 9th edition of the *Encyclopaedia Britannica* and other encyclopedias. A list of musicians compiled in this way from the 9th edition was compared with a list similarly constructed from the 11th edition, with a composite list obtained by asking members of the American Musicological Society to list the 10 musicians in history who have contributed most to music, and with a list based on a college questionnaire. Certain significant changes have taken place through the years: the rise of Bach, the fall of Rossini, the appearance of Debussy, and for the college group that

of Gershwin. The leaders are Bach, Beethoven, Wagner, and Mozart.—*M. Lee* (Chicago).

6347. **Faulkner, R. A research program in art appreciation.** *J. educ. Res.*, 1939, **33,** 36–43.—An analysis of the problem of art appreciation and its integration in the school curriculum and by social agencies. The problem of art appreciation requires first the statement of objectives and then the development of tests or techniques to measure them.—*S. W. Fernberger* (Pennsylvania).

6348. **Fearing, F. Conforming behavior and the J-curve hypothesis.** *Psychol. Bull.*, 1939, **36,** 555.—Abstract.

6349. **Frank, L. K. Family planning and cultural change.** *J. Hered.*, 1939, **30,** 273–278.—The cultural context, which gives significance to the widespread practice of contraception today, includes: the stresses and strains surrounding the family, the emancipation of woman, the loss of personal emotional security, the many conflicting concepts of man's relation to society, upon which world-wide concern is at present focused; but chiefly it depends upon the newer insights and values for human nature and conduct which have influenced our concepts of sex, marriage, and parenthood.—*G. C. Schwesinger* (American Museum of Natural History).

6350. **Franz, J. G. Spontaneity training in public speaking classes: a preliminary report.** *Sociometry*, 1939, **2,** No. 3, 49–53.—"Stage fright" is described as "dread of negative networks coming from a new situation, an audience, which puts fear into an individual who acts quite naturally among his acquaintances as he meets them individually but who 'gets all tied up' when he first steps upon the public platform." The author describes several applications of sociometric technique to the problem, and suggests the following tentative conclusions: "1. Networks in a group can be used as instruments for helping a student overcome certain psychological speaking disabilities . . . 2. Impromptu theater techniques can be utilized for training in spontaneity in speaking situations. The student can be trained to warm up to his role as speaker by using individuals from the audience as auxiliary egos."—*L. J. Stone* (Vassar).

6351. **Garrison, K. C. Psychology of special abilities.** *Peabody Reflector*, 1939, **12,** 11–13.—Findings of several studies concerning ability in music and in art, and the relationship of these to other abilities, are reviewed with conclusions. Ability in a special field is not incompatible with poor general psychological traits, a fact which discounts the concept of general inferiority. Evidence of musical talent has been noted between the ages of 7 and 13 years, while art ability generally comes later. Family resemblances seem evident in musical ability. Indian children's norms of performance on the Seashore test are significantly lower than norms for white children, but Japanese children compare favorably with whites. No consistent or significant differences have been found between negro and white children. Correlation between rate of piano learning and chronological age was .60 and with mental age only .23, showing the importance of maturation and "readiness." 7 was indicated as the critical age for beginning piano lessons. In both music and art, appreciation rather than performance should be sought in courses. Use of special abilities can be made in motivating other activities, such as the study of foreign language in order to supplement singing ability. The desirability of personality changes may also be made evident to a student.—*D. Bailey* (Mary Baldwin College).

6352. **Gifford, M. F. Correcting nervous speech disorders.** New York: Prentice-Hall, 1939. Pp. x+197. $2.85.—The purpose of the volume as stated in the preface is "to bring into focus the technique for the correction of stammering that is practiced in the California public schools." A brief discussion of the qualifications of a speech therapist is followed by a section on "principles of remedial technique" based on the theory that "stammering has no organic or functional origin, but is a problem of emotional maladjustment involving the total personality." Part III is devoted to illustrative materials, such as relaxation exercises and vocal drills. One chapter addressed to parents of stuttering children lists the home situations held to exert a causative influence on the speech difficulty. A final section on psychological re-education gives general advice on the avoidance of emotional tension and praises the silence period practiced by disciples of Tagore.—*W. H. Wilke* (New York University).

6353. **Grassler, R. Der Sinn der Sprache.** (The meaning of speech.) Lahr, Baden: M. Schauenburg, 1938. Pp. 208. RM. 7.—The meaning of word and sentence lies in its relation to reality. It appears in consciousness as insight into activities, their factors and applications, and is based on the perception of "Gestalten." From these are derived thought-acts of abstract knowledge of masses, number, and structure of the objects of thought. Judgment gives insight into the dynamics of the world, the powers of nature, organisms, souls, and culture. The pre-speech idea shows centers of the course of action, through which activity is experienced. Speech expresses these categories as: thing, quality, activity, i.e., noun, adjective, and verb. The sentence is the symbol of causal relationship. Subjects designate things from which activity proceeds; predicates, the activity which operates on the object. Prepositions indicate the direction of force and the situation. Adverbs fix more exactly the place, time, and course of the action.—*R. Grassler* (Berghof bei Trachenberg).

6354. **Greene, J. E. Interregional migration of psychological talent.** *Psychol. Bull.*, 1939, **36,** 504–505.—Abstract.

6355. **Gundlach, R. H. The analysis of the programs and effectiveness of peace societies.** *Psychol. Bull.*, 1939, **36,** 532.—Abstract.

6356. **Hanks, L. M., Jr. Adulthood of the favored child among the Northern Blackfeet.** *Psychol. Bull.*, 1939, **36,** 541–542.—Abstract.

6357. **Harms, E. The relationship between body measurements and the development of implements and tools.** *In* Munksgaard, E., *Congr. int. Sci. anthrop. ethnol., Copenhague*, 1938. Copenhagen: Hoffenberg, 1939. Pp. 234.—Abstract.

6358. **Harms, E. A test for types of formal creativity.** *Psychol. Bull.*, 1939, **36,** 526–527.—Abstract.

6359. **Hartshorne, H. Growth in religion.** *Relig. Educ.*, 1939, **34,** 143–151.—Religious growth is a function of culture and as such should reflect cultural changes. However, though we live in a democratic culture we still adhere to an authoritatively given form of religion, denying to individuals the necessary experiences to make religion a vital reality. It is here that the processes of creative religious education, with emphasis upon individual participation, must be applied. An extended discussion of the paper follows.—*F. A. Mote, Jr.* (Brown).

6360. **Hinckley, E. D., & Hinckley, M. B. Attitude scales for measuring the influence of the work relief program.** *J. Psychol.*, 1939, **8,** 115–124.—A complete description of the procedure used in constructing scales to measure the following attitudes is reported: (1) attitude toward the work relief program as a solution to the financial depression; (2) attitude toward personal responsibility in earning a living; and (3) attitude toward receiving relief.—*J. McV. Hunt* (Brown).

6361. **Huffman, E. S. The construction and evaluation of a scale to measure attitudes of stutterers toward any social situation.** *Proc. Ind. Acad. Sci.*, 1939, **48,** 196–197.—Two scales for measuring attitudes to any social situation were constructed, one being intended for stutterers. No differences between the scales were found. Increasing the number of alternatives of response did not increase the reliability of the scale. The final scale is not reproduced.—*C. M. Louttit* (Indiana).

6362. **Jenness, A. A critique of the telic continuum and the J-curve hypothesis.** *Psychol. Bull.*, 1939, **36,** 531–532.—Abstract.

6363. **Johnson, A. D. An attempt at change in inter-personal relationships.** *Sociometry*, 1939, **2,** No. 3, 43–48.—Since it may often be impractical to shift the individual from the group in which he is maladjusted, as is common in sociometry, it is desirable to develop a technique of bringing "the individual from his state of isolation into group acceptance." Two Junior Hi-Y clubs of 14-year-old boys in Rhode Island served as experimental and control groups. The criterion for determining leaders, average members, and isolates was the selection of individuals with whom each boy would like to work on a committee. The leader in the experimental group was asked to try to get the other boys to like one of the isolates. The adult leader tried to do the same for the other isolate in the same group. The amounts of change in later sociograms were compared with those in the control group, where no special techniques were used to change the status of any of the members. The technique of using the adult leader was unsuccessful, but the isolate who was "sponsored" by the boy leader of the group improved in status more than did the isolate in the control group, and comparison with analogous chance changes indicated that this result was significant.—*L. J. Stone* (Vassar).

6364. **Knower, F. H. Graduate theses—an index of graduate work in the field of speech. IV.** *Speech Monogr.*, 1938, **5,** 1–15.

6365. **Knower, F. H. A study of speech attitudes and adjustments.** *Speech Monogr.*, 1938, **5,** 130–203.—Three scales were devised to measure aspects of personality related to effectiveness of speech. The first, called a speech attitude scale, is composed of items designed to measure the individual's positive or negative reaction to various speech situations, e.g., "I hesitate to make special requests of a waiter in a restaurant," etc. The second scale, called a speech experience inventory, is intended to elicit information concerning the kind and amount of speaking the individual does. A third scale tests acceptance of social conventions which serve as rationalizations for the avoidance of opportunities to speak, such as "Persons who criticize the work of a superior are tactless," etc. The procedures used in item validation and determination of reliability of the scales are described in detail. The principal conclusions are: Final forms of the speech attitude and speech experience scales are highly reliable; the speech convention scale has a lower reliability (.80). Large individual differences in attitudes and experience were found. Correlations of test scores with experts' ratings and group differences in test scores in the expected direction indicate satisfactory validity for the attitude scale and the experience scale. Validity coefficients for the convention scale were lower. Negative correlations between the speech convention scale and the other two indicate that speech attitudes and activities are related to the acceptance or rejection of speech conventions, in accordance with the hypothesis which led to the development of the scale. Most of the data in the study is based on groups of from 200 to 600 subjects.—*W. H. Wilke* (New York University).

6366. **Lee, A. McC., & Lee, E. B. [Eds.] The fine art of propaganda.** New York: Harcourt, Brace, 1939. Pp. xi+140. $1.50.—A report by the Institute for Propaganda Analysis of a scientific investigation of the devices used by Father Coughlin in his radio addresses. Seven ABC's of propaganda analysis, together with the chief tricks used by professional propagandists, are listed. Each of the latter is illustrated in an analysis of Coughlin's speeches. A chapter describes a detailed application of scientific analytic techniques, each represented by an appropriate sign. A concluding chapter offers an annotated bibliography dealing with propaganda.—*P. S. de Q. Cabot* (Simmons).

6367. **Liebe, A. Die Ästhetik Wilhelm Diltheys.** (The esthetics of Wilhelm Dilthey.) Bleicherode a. H.: Nieft, 1938. Pp. 79.

6368. **Lincoln, J. S. The Southeastern Chinantla of Mexico.** *Sci. Mon., N. Y.*, 1939, **49**, 57–65.—Accounts of witches and witchcraft stories of interest to the psychologist.—*O. P. Lester* (Buffalo).

6369. **Linke, G. Problemgeschichtlicher Überblick über Quantitäts- und Lautdauermessungen.** (Historical survey of the problem of measuring quantity and duration of sounds.) *Arch. ges. Phon.*, 1939, Abt. 1, **3**, 108–116.—For short sounds the thresholds are about ± 3–4ϕ, for long sounds about ± 6–8ϕ. With long sounds the listener needs about double the temporal difference between test and comparison syllables to be certain which is longer or shorter. This is in keeping with the Weber-Fechner law. Linguistically it is important that the thresholds of 3–4ϕ and 6–8ϕ respectively approximate the range of variation of 5 for short and 10 for long sounds. Thus the variation in length of short and of long vowels (in actual speech)—guided as it is by auditory control—is in fact the result of perception. Whatever holds for auditory perception by another probably holds also for one's own perception of sounds uttered by oneself, through auditory and muscular feeling. Psychologically, phonological short sounds comprise a homogeneous class, for only at extreme limits and with fixed attention can deviations from the mean duration of short sounds be noticed.—*P. L. Krieger* (Leipzig).

6370. **Lippitt, R. Field theory and experiment in social psychology: autocratic and democratic group atmospheres.** *Amer. J. Sociol.*, 1939, **45**, 26–49.—The author illustrates briefly the type of research projects which may be expected to emerge from the field-theoretical formulation of sociological and socio-psychological problems. A "total behavior" technique of observation of group and individual child behavior is briefly described which attempts to record all meaningful social behavior in its proper relationship to other facts of the "total field" of coexisting phenomena influencing behavior. By the experimental manipulation of the social atmospheres of two children's clubs, using the variable of authoritarian versus democratic leadership methods, it is indicated that quantitative and qualitative data were secured which seem to clarify, in a preliminary, empirical fashion, such dynamic concepts as group locomotion, group goal, degree of group unity, group stratification, group and member space of free movement, social power field, degree of belongingness, and membership status. A preliminary approach to the problem of analyzing the same material (social behavior data) from the sociological and psychological points of view, using the same realm of discourse, is attempted. A bibliography of 10 items is included.—*D. L. Glick* (Brown).

6371. **Lippitt, R., & White, R. K. Individual differences as related to autocratic and democratic group atmospheres.** *Psychol. Bull.*, 1939, **36**, 557.—Abstract.

6372. **Lipps, H. Die Verbindlichkeit der Sprache.** (Composition in speech.) *Bl. dtsch. Phil.*, 1938, **12**, 282–292.—*P. L. Krieger* (Leipzig).

6373. **Loomis, C. P., & Davidson, D. M., Jr. Social agencies in the planned rural communities.** *Sociometry*, 1939, **2**, No. 3, 24–42.—The importance and development of formal organizations was studied in 7 resettlement communities in the South and Southwest, ranging in size from 32 to 484 families. The families had resided in the communities from one month to 2½ years. Control studies were carried out in three well-established communities, and in the areas surrounding two of the projects. It was found that religious organizations were by far the most important; although church attendance was slightly less than it had been previous to resettlement, it was still relatively high. Attendance at non-church meetings was considerably higher than previously; this is partly a function of the activities sponsored by the resettlement agencies. Individuals who were leaders before resettlement were more likely to become leaders in the new communities than those who had not previously been leaders. The data are presented in detail for the various communities and age and sex groups.—*L. J. Stone* (Vassar).

6374. **Mann, C. W. Prestige and psychometrics in a primitive society.** *Psychol. Bull.*, 1939, **36**, 541.—Abstract.

6375. **Mason, H. An experiment in shifting attitudes.** *Proc. Ind. Acad. Sci.*, 1939, **48**, 185.—Abstract.

6376. **Mercier, A. Sur les opérations de la composition musicale.** (On the operations of musical composition.) *Arch. Psychol., Genève*, 1939, **27**, 186–232.—What is the mathematical structure of art? The author discusses the various operations found in musical construction as related to the mathematical theory of groups. He applies this concept to the study of harmony and rhythm. Various examples are given.—*G. Dvoretzki* (Geneva).

6377. **Miotto, A. Problemi della psico-sociologia moderna.** (Problems of modern psychosociology.) *Riv. Psicol. norm. pat.*, 1939, **35**, 109–111.—*T. M. Abel* (New York City).

6378. **Mowrer, E. R. Family disorganization.** (2nd ed.) Chicago: Univ. Chicago Press, 1939. Pp. xv+356. $3.00.—The revision of this book, first published in 1927, "has been limited to bringing the statistical data up to date." The original tables and other statistical material in the body of the book have not been changed, but a supplementary chapter on recent trends in family disorganization, with recent statistical data, has been added. The bibliography has been revised and enlarged.—*D. L. Glick* (Brown).

6379. **Naylor, H. M. The cooperative work of a child guidance clinic and a family agency.** *Smith Coll. Stud. soc. Work*, 1939, **10**, 1–35.—This study is concerned on the one hand with the kind of cases the family agency refers to the clinic and the sorts of service requested, and on the other with the kind of service the clinic in turn gives; and finally with an analysis of the cooperative work between the agency

and the clinic. The material for the study consists of 34 cases (18 girls and 16 boys) referred during 1936 and 1937 to the Hartley-Salmon Clinic by the Charity Organization Society of Hartford, Connecticut. The author concludes that the services the agency wanted most frequently were either psychiatric treatment or diagnostic study, and that the way in which the clinic gave such services in all save one case seems to suggest that the family agency had made a careful diagnosis of the child's difficulty before referral was made. The analysis of the cooperative work between the agency and the clinic shows that a close cooperation is most effective, for the clinic offers to the agency its own specialized service in regard to the treatment of children while the agency is free to work with the parents in the light of the clinic's diagnosis of the child's difficulties. —*K. S. Yum* (Chicago).

6380. **Nelson, S. E. The role of heredity in stuttering.** *J. Pediat.*, 1939, **14**, 643–654.—Comparisons of propositi belonging to pedigrees showing stuttering in their ancestry with propositi belonging to pedigrees showing no stuttering in their ancestry seem to indicate that there must be some biological tendency to stutter.—*M. P. Montgomery* (Faribault, Minn.).

6381. **O'Rourke, L. J. An experiment in social behavior.** *Psychol. Bull.*, 1939, **36**, 554.—Abstract.

6382. **Overstreet, H. A. Einfluss gewinnen. Die Technik der Menschenbeeinflussung.** (Winning influence; the technique of influencing people.) (2nd ed.) (Trans. by August Hoyer.) Leipzig: Meiner, 1939. Pp. 147. RM. 2.40.

6383. **Park, R. E. Symbiosis and socialization: a frame of reference for the study of society.** *Amer. J. Sociol.*, 1939, **45**, 1–25.—Two fundamental types of interaction, competition and communication, are everywhere active in bringing into existence and maintaining the types of social order and organization characteristic of society. So-called plant and animal communities exist everywhere in which the different species live together in forms of association that may be described as symbiotic rather than social. Animals, particularly insects, exhibit forms of association that are fundamentally familial, and based less upon competition than upon instinct and communication. In human society competition is progressively limited, as social relations become stabilized, by tradition and custom and by a moral order. In so far as the customary and moral order prevails over temporary impulses and interests of its individual members, society will be capable not only of concerted but of consistent collective action. Social institutions are effects of the efforts of societies to act collectively. The so-called "group mind" is merely a body of traditions, understandings, sentiments, and ideologies accumulated through conversation and communication, which make social intercourse, understanding, and collective action possible. Socialization is the process by which the individual finds, at various levels of social organization—ecological, economic, political, and moral or cultural—his place and function in society. The process by which the immigrant is incorporated in any social and cultural order is the reverse of that by which an individual born into a society finds his place in it.—*D. L. Glick* (Brown).

6384. **Rigg, M. G. The effect of register and tonality upon musical mood.** *Psychol. Bull.*, 1939, **36**, 552.—Abstract.

6385. **Scholz, H. Natürliches Sprachen und Kunstsprachen.** (Natural and artificial speech.) *Bl. dtsch. Phil.*, 1938, **12**, 253–281.—*P. L. Krieger* (Leipzig).

6386. **Soldau-Happe, —. Geschichte der Hexenprozesse.** (History of witchcraft trials.) Lübeck: Antäus-Verlag, 1938. Pp. 317. RM. 2.85.—*M. E. Morse* (Baltimore).

6387. **Stagner, R. A survey of social scientists' opinions on methods of preventing war.** *Psychol. Bull.*, 1939, **36**, 533.—Abstract.

6388. **Tennenbaum, R. Jewish parents in a child guidance clinic: a study of culture and personality.** *Smith Coll. Stud. soc. Work*, 1939, **10**, 50–76.—This investigation is based on the case records of 30 Jewish families whose children, by request of the parents, were patients of the Hartley-Salmon Clinic of Hartford, Connecticut, between January 1, 1935 and January 1, 1938. She finds that for the most part the Jewish children referred to the clinic by their parents were much like the Gentile children. However, there seems to be a factor of significant emphasis which Jewish parents attach to their children's behavior. Some of the reasons why Jewish parents find certain behavior traits disturbing are to be found in the Jewish culture, while others (and to some extent the same ones) bear a close relationship to the parents' peculiar personality traits and problems. She concludes that "behavior of any group of people cannot be adequately understood by reference to individual motivations alone." —*K. S. Yum* (Chicago).

6389. **[Various.] Mélanges de linguistique offerts à Charles Bally.** (Miscellanea on linguistics, in honor of Charles Bally.) Geneva: Georg, 1939. Pp. 515.—This collection of papers is dedicated to the Geneva linguist and contains 37 articles, among which the following have particular psychological interest: (1) E. Richter, *Unterbewusste Vorgänge im Sprachleben.* Perseveration is used to explain lapses in speech and in reading. (2) J. Vendryes, *Parler par économie.* The principle of economy is used to explain various incidents in the history of the development of language sounds and in vocabulary construction. (3) W. Real, *Linguistique et pédagogie.* (4). J. Marouzeau, *Dire "non":* a discussion of the tendency to say no. This tendency is much more vigorous in language than the tendency to be affirmative. Thus, "I do not like" means "I dislike." (5) A. Grégoire, *Le style des chroniqueurs financiers:* language imagery as used in the professional writings of the stock exchange.—*E. Claparède* (Geneva).

6390. **Waters, R. H. The J-curve hypothesis and behavior in a small community.** *Psychol. Bull.*, 1939, **36**, 554–555.—Abstract.

6391. **Watson, G. A socio-psychological case study of an institutional crisis: a methodological exploration.** *Psychol. Bull.*, 1939, **36**, 531.—Abstract.

6392. **Werkmeister, W. H. Natural languages as cultural indices.** *Phil. Sci.*, 1939, **6**, 356–366.—Many writers have maintained that there is a definite relation between the culture and mental attitude of ethnic groups and the structure of their languages. Thus Wundt contrasted the "subjective" or emotionally agitated language of the Arabs with the "objective" language of the Chinese. More recently Graebner and others have called attention to the close relation between the syntax of the Eskimo language and the *Weltanschauung* induced by the gloomy environment in which the Eskimos live. Also Cassirer associates various language types with specific cultural centers; while Schmidt correlates "prefix languages" and "suffix languages," respectively, with mother-right cultures and father-right cultures. The author, although very much interested in this last thesis, which he discusses in considerable detail, does not maintain that such doctrines can be rigorously established, but merely that "the correlation of language types and culture types, as here suggested, is positive and is sufficiently well established to deserve careful consideration."—*R. H. Dotterer* (Pennsylvania State).

6393. **Wiley, L. W. The validity of four accepted criteria of design.** *Psychol. Bull.*, 1939, **36**, 551–552.—Abstract.

6394. **Williamson, A. C., & Remmers, H. H. Persistence of attitudes concerning conservation issues.** *Proc. Ind. Acad. Sci.*, 1939, **48**, 183–184.—Abstract.

6395. **Wilson, D. J. An experimental investigation of Birkhoff's aesthetic measure.** *J. abnorm. soc. Psychol.*, 1939, **34**, 390–394.—The results of this investigation do not support the hypothesis of Birkhoff that his a priori measure is a true measure of aesthetic value as far as polygons and geometrical figures are concerned. It is suggested, furthermore, that if the hypothesis fails here, it will fail a fortiori in more complex realms of art.—*C. H. Johnson* (Portland, Ore.).

[See also abstracts 6023, 6035, 6045, 6083, 6090, 6107, 6123, 6145, 6191, 6216, 6217, 6230, 6235, 6260, 6275, 6288, 6294, 6314, 6318, 6397, 6413, 6443, 6451, 6500, 6513, 6528, 6530, 6531, 6533, 6536, 6538, 6542, 6544, 6547, 6548, 6553, 6557.]

CRIME AND DELINQUENCY

6396. **Berman, N. Juvenile delinquency under the Soviets.** *J. crim. Law Criminol.*, 1939, **30**, 68–76.—During the first 17 years of the Soviet Union's existence delinquency and criminality were considered to be a result of the former capitalistic economic and social regime, and were treated with great leniency. But with abolition of unemployment and a rise in economic and cultural level the view was taken that the young offender was a neglected or wilfully misguided youth, and the 1935 code provided severe punishment for adults considered responsible for contributing to his delinquency either as accomplices or as negligent guardians. With delinquency and crime on the decrease, there seems to be a greater acceptance of psychological and psychiatric factors in crime and a greater emphasis on the individual therapeutic approach. Correctional institutions embody graphically the Soviet criminological ideology: all inmates are productively employed, in the more advanced institutions at prevailing union wages; some form of self-government and group participation is universal, even to the extent at times of passing upon admissions and leaves of their fellow inmates; forms of self-expression include newspapers with self-criticism and criticism of the management, "pep-talks," dramatics, music, and particularly sports; discipline depends upon social pressure, denial of privileges, or transfer to an institution with more rigid discipline, while corporal punishment and bread-and-water diet are prohibited by law. The most advanced form of institution is the self-administering and self-contained commune, e.g., Bolshevo, most of whose "graduates" prefer to remain in the commune. All inmates upon release can step into a suitable job or educational institution. Crime and gangster stories are given minimum newspaper space and are absent from the cinema. The Soviet program of rehabilitating the delinquent is closely linked with the Soviet approach to life in general.—*L. Ackerson* (Illinois Institute for Juvenile Research).

6397. **Doll, E. A., & Fitch, K. A. Social competence of juvenile delinquents.** *J. crim. Law Criminol.*, 1939, **30**, 52–67.—The Vineland social maturity scale was administered to 91 delinquent boys at the State Home for Boys at Jamesburg, N. J. Correlation of SA (social age) with life age was .41, and when mental age (MA) was partialed out was reduced to about .25. Correlation of SA with MA was .50. Correlation of SA with estimates by cottage "parents" of social competence was .80. Correlation of life age with "social quotient" was −.21. Median social quotient was 72.5 and median mental quotient was 70. Correlation of social-competence classification and mental classification (contingency coefficient) was .44. The conclusion suggested is that the social competence of delinquents is strikingly below that of normal non-delinquents, but how much of this difference may be due to mental retardation is not ascertainable in this study. Bibliography.—*L. Ackerson* (Illinois Institute for Juvenile Research).

6398. **Erickson, M. H. Negation or reversal of legal testimony.** *Arch. Neurol. Psychiat., Chicago*, 1938, **40**, 548.—Two sisters, aged 9 and 11, were subjected to extremely unpleasant experiences by sadists. When first interviewed both gave the same apparently true story. Several months later the two,

separated meanwhile, both denied the story and had apparently forgotten the facts, describing the situation as one that "could be imagined but not endured."—*M. P. Montgomery* (Faribault, Minn.).

6399. **Galdo, L. Caratterologia e criminalità.** (Characterology and criminality.) *Riv. Psicol. norm. pat.*, 1939, **35**, 61–67.—The importance of environmental conditions as affecting criminal behavior is stressed as against a typological influence.—*T. M. Abel* (New York City).

6400. **Goll, A. Criminal types in Shakespeare.** *J. crim. Law Criminol.*, 1939, **30**, 22–51.—*L. Ackerson* (Illinois Institute for Juvenile Research).

6401. **Gummersbach, H. Die Kriminalpsychologie und ihre Bedeutung für die praktische Seelenkunde.** (Criminal psychology and its significance for practical psychology.) Bad Homburg: Siemens-Verl., 1938. Pp. 69. RM. 1.75.

6402. **Houtchens, H. M. An experimental study of the process of adjustment in delinquent and non-delinquent children.** *Psychol. Bull.*, 1939, **36**, 507.—Abstract.

6403. **Karpman, B. The delinquent as a type and personality.** *J. crim. Psychopath.*, 1939, **1**, 24–33.—The problem of the delinquent as a type and personality is discussed and the conclusion reached that there is no particular type or personality that may be characterized as being specifically delinquent. 4 case studies are cited to support this thesis.—*A. Chapanis* (Yale).

6404. **Le Mesurier, L. Boys in trouble.** (2nd ed.) London: John Murray, 1939. Pp. xxii+300. 3s. 6d.—An account, from the lay point of view, is given of the backward methods of handling the Borstal boys with whom the author worked at Wormwood Scrubs.—*E. D. Hunt* (Brown).

6405. **Leonhardt, C. Ein wichtige Schuldindiz.** (An important indication of guilt.) *Arch. Kriminol.*, 1939, **104**, 214–224.—Guilt feeling is a complex of fear and shame, combined with feelings of lying and doubt. Innocence carries superiority, which, however, may be obscured by accessory emotions of fear and shame. Technical measures are indicated to increase the feeling of innocence by sidetracking these accessory emotions, or to deepen the sense of guilt and so to decrease psychic tension that deception is impossible. The most important is a preliminary building up of a guilt picture. The innocent defendant defends himself vigorously, independently, frankly, and attentively, and desires to talk. His feelings of innocence and aggressiveness are strengthened. This contrasts with the oppressed, inhibited, evasive, and apathetic behavior of the guilty. Inhibition in defense is an almost certain indication of guilt. If the defendant will not confess, he should be asked to explain his unusual behavior, which he will be unable to do convincingly.—*M. E. Morse* (Baltimore).

6406. **Lyon, F. E. Psychology and crime.** *J. crim. Law Criminol.*, 1939, **30**, 223–227.—Crime is not a matter of physical heredity only, but one of social responsibility as well. The Central Howard Association of Illinois aims to surround the released prisoner with normal environment and a wholesome "suggestion therapy."—*L. Ackerson* (Illinois Institute for Juvenile Research).

6407. **Mann, C. W., & Mann, H. P. Age and intelligence of a group of juvenile delinquents.** *J. abnorm. soc. Psychol.*, 1939, **34**, 351–360.—Nearly two thirds of the 1731 juvenile delinquents studied were boys. The mean age was 14.47 years. The mean IQ of the total group was 84.45. There are no sex differences of statistical significance with respect to mean age, variability of age, percentages in the various age groups, mean IQ, variability of IQ, and percentages in the various IQ levels. The group of boys 14 years and over tended to have a slightly higher mean IQ than that of the group below 14 years. This difference did not appear in the distribution of the results of the girls.—*C. H. Johnson* (Portland, Ore.).

6408. **Mann, C. W., & Mann, H. P. An analysis of the results obtained by retesting juvenile delinquents.** *J. Psychol.*, 1939, **8**, 133–141.—428 juvenile delinquents were tested, first on the Stanford-Binet and later, at intervals varying up to 10 years, on the New Revision, Form L. The study is concerned with an examination of the coefficients of correlation between the results of the first and second tests; a comparison of means obtained on the first and second tests; and an analysis of the individual changes in IQ at different retest intervals and at different IQ levels. Over the period of retest the mean change in IQ was but one IQ point for the total group, with individual differences in IQ ranging from zero to 30 points. Since their first test some of the delinquents have been placed in foster homes, some have been institutionalized for longer or shorter periods, various educational programs have been tried, many have had medical and surgical treatment, yet in but 7% were there changes of more than 17 IQ points. These results are considered the more significant in view of the fact that nearly one third of the total group was retested at intervals of 5 years or more.—*J. McV. Hunt* (Brown).

6409. **Meixner, —. Die Prüfung der Glaubwürdigkeit.** (Proving credibility.) *Kriminalistik*, 1939, **13**, 175–177.—A review of a case involving false accusation of incest. The case shows the necessity of not assuming that a person of bad reputation is guilty of a crime of which he is accused by a person of apparently good character.—*M. E. Morse* (Baltimore).

6410. **Odoroff, M. E., & Harris, D. B. A study of the interest-attitude test scores of delinquent boys.** *Psychol. Bull.*, 1939, **36**, 567–568.—Abstract.

6411. **Owens, C. D. An eight-weeks' experiment in silent reading among forty-three unselected male adult defective delinquents.** *J. crim. Psychopath.*, 1939, **1**, 1–23.—The delinquents were divided into 3 grades on the basis of results achieved on an initial silent reading examination. Group instruction in silent reading by the phonetic method was

given over a period of 8 weeks. Final examinations showed improvements in silent reading ability ranging from one-half year to more than two years. 38 of the men increased their EA's, 3 remained constant, none regressed. Great progress was shown at both ends of the IQ and MA ranges, so that these factors were not predictable.—*A. Chapanis* (Yale).

6412. **Shaskan, D. One hundred sex offenders.** *Amer. J. Orthopsychiat.*, 1939, **9**, 565–570.—This is an analysis of 100 male sex offenders sent to Bellevue Hospital for psychiatric examination between August 10 and October 14, 1937. 5 case histories are included.—*R. E. Perl* (New York City).

6413. **Thornton, G. R. The ability to judge crimes from photographs of criminals: a contribution to technique.** *J. abnorm. soc. Psychol.*, 1939, **34**, 378–383.—Two important controls were exercised: the 20 criminals selected were chosen without any knowledge of their appearance; and a method of recording judgments was developed which made it possible to determine with some exactness how many of the correct responses should be attributed to cues arising from the photographs. The results from 175 students, who acted as judges, indicated that the average student can gain some cues from photographs which aid him slightly in making correct judgments. The number of correct judgments attributable to cues arising from the photographs is of negligible practical importance; but that the ability to gain such cues is real is attested by a high degree of statistical reliability.—*C. H. Johnson* (Portland, Ore.).

6414. **Tolman, R. S. Note on family position of certain delinquent boys.** *Amer. J. Orthopsychiat.*, 1939, **9**, 635.—The author is interested in the question "Are delinquent boys in families of *two children only* more likely to be the older or the younger of the two, and is the other sibling more likely to be a brother or a sister"? With 116 cases there was a nearly random distribution.—*R. E. Perl* (New York City).

6415. **Tolman, R. S. Some differences in attitudes between groups of repeating criminals and of first offenders.** *J. crim. Law Criminol.*, 1939, **30**, 196–203.—An oral questionnaire given to 50 adult repeating criminals and to 50 first offenders in Los Angeles showed that the repeaters made statistically significant higher scores in political insurgency, "chip on the shoulder," antagonism toward authority, reserve with father, antagonism toward father, reserve with mother, and lack of integration with ideal.—*L. Ackerson* (Illinois Institute for Juvenile Research).

6416. **Trovillo, P. V. A history of lie detection.** *J. crim. Law Criminol.*, 1939, **29**, 848–881; **30**, 104–119.—The ancient and medieval use of the ordeal, and the modern scientific studies of pulse, blood pressure, flow of blood to the head, etc., word association, action currents, body temperature, respiratory changes, galvanic skin reaction, various reaction times, and lesser known devices are systematically discussed.—*L. Ackerson* (Illinois Institute for Juvenile Research).

6417. **Whitaker, E. de A. Introducção ao estudo de psychologia e psychiatria judiciarias.** (Introduction to medicolegal psychiatry and psychiatry.) *Rev. Neurol. Psychiat., S. Paulo*, 1939, **5**, 65–73.—In his introductory lecture to the 1939 course in medicolegal psychology at the São Paulo Institute of Criminology, Whitaker discusses the evolution of criminal anthropology and the concept of "the criminal." He classifies delinquents as: social (accidental); delinquent personalities (normal or psychopathic); and psychotic criminals. From the concept of a particular type (Lombroso), we pass to the idea of a sociological group of heterogeneous individuals predisposed to crime by various personal factors, which is the nucleus of modern criminal anthropology. The practical work in the course includes study of personality types, psychology of the delinquent, psychology of and methods of obtaining evidence, organization of hospitals for the criminal insane, and the mental hygiene and treatment of the delinquent. French résumé.—*M. E. Morse* (Baltimore).

6418. **Wiers, P. Juvenile delinquency in rural Michigan.** *J. crim. Law Criminol.*, 1939, **30**, 211–222.—There is considerable delinquency in the Michigan rural areas, though less per capita than in industrial ones. In industrial areas seasonal variation in frequency is less marked.—*L. Ackerson* (Illinois Institute for Juvenile Research).

6419. **Wortis, J. Sex taboos, sex offenders and the law.** *Amer. J. Orthopsychiat.*, 1939, **9**, 554–565.—The author discusses what is a sex offense, the relativity of sex offenses, adultery, rape and incest, indecent exposure, offenses against children, sodomy, the function of taboos. "Sex offenders are individuals whose sex behavior runs counter to currently established sex taboos. Taboos are essential to the preservation of any one normal pattern of sexual behavior, but both the sexual behavior pattern and its regulatory taboos are proper subjects for critical evaluation. Individuals who have not been adequately exposed to the influence of our sexual traditions or who are deprived of the opportunity of following the normal pattern of sex behavior often become sexually perverted. A just administration of the law requires that separate consideration be given to individual cases and circumstances."—*R. E. Perl* (New York City).

6420. **Zulliger, H. Jugendliche Diebe im Rorschach-Formdeutversuch. Eine seelenkundliche und erzieherische Studie.** (Youthful thieves and the Rorschach test. A psychological and pedagogical study.) Bern: Haupt, 1938. Pp. 166. Frs. 7.50.—The Rorschach test often indicates whether a youthful thief may be re-educated to become normal, or whether this is impossible or possible only to a limited extent. The diagnosis "thief" mistakes a symptom for a causal condition, and the test frequently suggests pedagogical measures which may improve the situation. Stealing in young people

may be due to a great variety of psychic causes. Conditioning factors are a labile, egocentric, impulsive affectivity, pronounced motility, and especially confabulatory traits of a conscious or unconscious nature.—*H. Zulliger* (Ittigen).

[See also abstracts 5982, 6082, 6241, 6264, 6303, 6330, 6501.]

INDUSTRIAL AND PERSONNEL PROBLEMS

6421. **Allgaier, E. Experience counts.** *Publ. Safety*, 1939, June.—Drivers are at their best in terms of reaction time, strength, visual acuity, etc., at the age of 25. But their prime, as determined by accident rate or traffic violations, is 20 years later. Thus there are factors (such as caution and experience) not measured by the usual driving tests that are of importance in driving.—*H. Schlosberg* (Brown).

6422. **Békésy, G. v. Psychologie und Fernsprechtechnik.** (Psychology and telephone technique.) *Forsch. Fortschr. dtsch. Wiss.*, 1938, **14**, 342–344.—*P. L. Krieger* (Leipzig).

6423. **Bergen, H. B., & Dean, J. A study of employees' attitudes.** *Psychol. Bull.*, 1939, **36**, 549.—Abstract.

6424. **Brown, C. W. Results from the use of special tests for automobile drivers.** *Psychol. Bull.*, 1939, **36**, 523–524.—Abstract.

6425. **Burling, T. Personality in the economic situation.** *Amer. J. Orthopsychiat.*, 1939, **9**, 616–623.—Business men are making an important error in accepting uncritically the notion of the "economic man." In dealing with their employees they often do not consider motives other than those of rational self-interest. The modern psychiatric concept of "the total personality in the total situation" must be impressed upon business men. However, if this understanding is to be made available to business men, psychiatrists themselves must have a fuller grasp of the integration of economic factors with the total environment.—*R. E. Perl* (New York City).

6426. **Garrison, K. C. The use of psychological tests in the selection of student nurses.** *J. appl. Psychol.*, 1939, **23**, 461–472.—The IQ's, mechanical aptitude, and reading scores of student nurses were found to correlate with academic grades and grades in nursing arts. Qualitative differences between 5 student nurses with high efficiency ratings and 5 with low ratings were noted on the Bernreuter inventory.—*E. E. Ghiselli* (California).

6427. **Gewirtz, N. B. A practical test for punch press operators.** *Proc. Ind. Acad. Sci.*, 1939, **48**, 185.—Abstract.

6428. **Hay, E. N. [Chairman.] The use of tests in employment and promotion.** *Stud. Personnel Policy*, No. 14. New York: Nat. Indus. Conf. Bd, 1939. Pp. 23. Paper, apply.—This bulletin reports a panel discussion on the use of tests as an aid in industrial employment, by four members of the National Industrial Conference Board. A general outline of the subject is followed by discussions of three specific subjects: (1) selection of persons for office work, (2) selection of field representatives, and (3) selection of salesmen. A report of the discussion between the panel members and members of the audience is included. Important conclusions from the meeting are: (1) Tests have proved their value as an aid in perfecting employment technique. (2) They must be used with skill, judgment, and knowledge of applicability to the objective sought. (3) Tests should be used not to replace interviewing, but to supplement conclusions drawn from the interview.—*R. M. Gagné* (Brown).

6429. **Karslake, R. H. A technique for measuring consumer attitude toward any advertisement.** *Proc. Ind. Acad. Sci.*, 1939, **48**, 193–195.—Describes the construction of a scale, following Likert's technique, for measuring attitudes toward an advertisement. The reliability of the complete scale of 20 items was approximately .90. The scale is not reproduced.—*C. M. Louttit* (Indiana).

6430. **Karslake, J. S., & Tiffin, J. A simple and direct approach to measurement of the attention value of advertising copy through eye-movement photography.** *Proc. Ind. Acad. Sci.*, 1939, **48**, 184.—Abstract.

6431. **Kurtz, A. K. Selecting salesmen by personal history items: methods and results.** *Psychol. Bull.*, 1939, **36**, 528.—Abstract.

6432. **Lahy, J. M. Un "dispatching" pour le contrôle permanent du fonctionnement du laboratoire de psychotechnique.** (A system for controlling the operation of the psychotechnical laboratory.) *Travail hum.*, 1939, **7**, 147–152.—Each laboratory room has a microphone, so that the director can listen to any examination in progress by plugging in. He can signal to the examiner by a buzzer or signal lamp if the test is not being properly administered. There are automatic signs to indicate that a test is in progress and to request silence.—*H. E. Burtt* (Ohio State).

6433. **Laugier, H., & Weinberg, D. Etude du métier d'aiguilleur des chemins de fer.** (Study of the job of railroad switchman.) *Travail hum.*, 1939, **7**, 129–146.—A comprehensive set of specifications in topical form, with brief paragraphs interspersed. The items are: previous training; age and sex; physical demands on circulatory and digestive systems; neuromuscular aspects, such as muscle groups involved; sensory functions; requirements in memory, intelligence, and emotional control.—*H. E. Burtt* (Ohio State).

6434. **Lawshe, C. H., Jr. A review of the literature related to the various psychological aspects of highway safety.** *Engng. Bull. Purdue, Res. Ser.*, 1939, **23**, No. 2a. Pp. 59.—A review of the literature, especially since 1930, relating to the automobile driver and the factors of psychological significance in highway engineering. The bibliography includes 186 references.—*C. M. Louttit* (Indiana).

6435. **Muster, D. Piata muncii profesorului.** (The market for the labor of the professor.) *J. Psihoteh.*, 1938, **2**, 15–25.

6436. **Palmer, D. W. Industrial relations in the United States.** *Occup. Psychol., Lond.* 1939, **13**, 178–199.—The conflicts between new economic controls and long established beliefs and practices result in frustrations which will be cleared up only when American society achieves a new economic principle. The industrial relations problem is primarily a social one, and this is intensified by the fact that industries tend to look upon workers as sources of human energy to be taken on or laid off in exactly as impersonal a manner as one operates an electric motor, and also because trade unions act only as negative forces resisting the industrial conditions which they confront and failing to find spokesmen capable of expressing their wants.—*H. Moore* (Mt. Holyoke).

6437. **Ramsay, J., & Rawson, R. E. Rest pauses and refreshments in industry.** London: National Institute of Industrial Psychology, 1939. (Report 8.) Pp. 52. $0.50.—Inquiry into the frequency of rest pauses in varied industries showed that they are commonly found, are rarely introduced after scientific experiment, are most commonly of 10 minutes, duration, are most often spent in the workroom, and are almost invariably used for the consumption of refreshments. Refreshments, supplied by management, are more frequent in factories that have rest pauses than in others. Where rest pauses have been abolished, the cause lies in the abuse of the privilege by employees and in changes in the hours of work.—*H. Moore* (Mt. Holyoke).

6438. **Swope, A. Judgment test on safe driving practices.** Bloomington, Ill.: McKnight & McKnight, 1939. Pp. 8. $3.50 per 100.—The items in this test deal exclusively with judgment factors in driving. The selection of the items was made on the basis of opinions as to the value of the item obtained from commercial and non-commercial drivers and a cross-section of university students. Norms are based on scores achieved by 1151 high school students. Correlation between scores on this test and the Otis self-administering intelligence tests yields an r of .70.—*M. Keller* (Butler Hospital).

6439. **Tiffin, J. Industrial psychology.** *Proc. Ind. Acad. Sci.*, 1939, **48**, 185–186.—Abstract.

6440. **Tiffin, J., & Greenly, R. J. Experiments in the operation of a punch press.** *J. appl. Psychol.*, 1939, **23**, 450–460.—A miniature test for measuring ability to operate an industrial punch press is described. The test was found to differentiate experienced punch press operators from inexperienced individuals. Negative correlations were found between speed and accuracy.—*E. E. Ghiselli* (California).

6441. **Walters, J. E., & Greenly, R. J. [Eds.] Personnel and industrial relations.** *Engng. Bull. Purdue, Res. Ser.*, 1939, **23**, No. 3. Pp. 133.—Includes 23 papers presented at the Industrial Personnel Institute held at Purdue University in June, 1938. 10 papers describe personnel work in as many industrial plants. 5 papers discuss workers' welfare and employer-employee relations. 2 papers describe foremen's clubs. 6 papers of specific psychological interest are: H. C. Taylor, Problems of selecting and evaluating employees; L. C. Shinn, Training the foreman on the floor; E. E. Gunn, Jr., Coordinating education in industry with the schools; F. K. Ferguson, Apprentice training in the metal trades; C. E. Goode, Job training; J. Tiffin, "Testing the tests" for employee selection in industry.—*C. M. Louttit* (Indiana).

6442. **Wilson, O. W. Police control of the automobile driver.** *J. crim. Law Criminol.*, 1939, **30**, 83–95.—From a study of 2500 automobile drivers it is concluded: that the accident frequency is in proportion to violation frequency, so that one may predict proneness to accident from violation frequency; that no driver is entirely accident-immune; that violation repeaters have the greatest accident expectancy; that drivers aged 20 to 30 years, especially if under 25, are more accident-prone than those 30 to 40 years of age; and that traffic school treatment is more effective than arrests, and arrests more effective than warnings.—*L. Ackerson* (Illinois Institute for Juvenile Research).

[See also abstract 6457.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

6443. **Armstrong, H. C. Interrelationships among criteria of reading ability and measures of visual functions.** *Psychol. Bull.*, 1939, **36**, 526.—Abstract.

6444. **Baruch, D. W. "Play techniques" in preschool as an aid in guidance.** *Psychol. Bull.*, 1939, **36**, 570.—Abstract.

6445. **Beck, R. L. Quackery in educational measurements.** *Educ. Adm. Superv.*, 1939, **25**, 37–44.—Educational direction depends on successful evaluation. Unfortunately there is quackery in educational measurement as well as in medicine. Faulty conclusions and abuses of testing devices have undermined confidence in their use. Failure to insist on validity, as well as reliability, in objective tests and the tendency to insist on predetermined standards such as curves of distribution are suggested by the author as outstanding faults.—*D. Bailey* (Mary Baldwin College).

6446. **Beeley, A. L. A clinical technique for the selection of prospective teachers.** *Sch. & Soc.*, 1939, **50**, 183–185.—In spite of the recognized importance of selecting students for teacher training courses who have suitable personalities, few tests exist which isolate and measure potential teaching ability. The University of Utah borrows methods from clinical medicine. First all available data are assembled regarding health, intelligence, and grades. Then the Thurstone personality schedule and the Bell adjustment inventory are given, and each case is considered individually by a group made up of the Dean of the School of Education, the physicians and

clinical psychologist, and the directors of teacher training. Students are categorically or conditionally denied or approved. The results are given of this method applied to 600 cases since May 1936.—*M. Lee* (Chicago).

6447. **Bellows, R. M. Guidance at the University of Maryland.** *J. Educ. Ass. Dist. Columbia*, 1939, **9**, 17–18; 28.

6448. **Benari, L. Aspectul sentimental al măsurătorilor antropometrice în şcoală.** (The sentimental aspect of anthropometric measurements in school.) *J. Psihoteh.*, 1938, **2**, 30–32.

6449. **Bernreuter, R. G. Primary ability tests applied to engineering freshmen.** *Psychol. Bull.*, 1939, **36**, 548–549.—Abstract.

6450. **Berry, C. S. What has mental hygiene to offer to special education?** *Ment. Hlth Observ.*, 1939, **6**, 6–20.—The author discusses the contributions which mental hygiene may make to the education of those individuals who occupy the extremes of the distribution with respect to physical and mental capacities and social adjustments.—*M. Keller* (Butler Hospital).

6451. **Bongioanni, F. M. I limiti psicologici dell' educabilità nei piano sociale.** (The limits of educability on the social level.) *Arch. ital. Psicol.*, 1938, **16**, 125–134.—The author examines the implications of psychological measures of educability from the social point of view. Between simple and complex mental activities there is only a quantitative, not an essential difference, involving various sectors which are stimulated by specific goals and by impulses of a selective and creative nature. The purpose rather than the manner of behavior determines the nature of this relationship. Automatisms may be considered as tentative solutions of a finalistic initiative, characteristic for every sphere of activity and immanent in the orderly arrangement of each type of formation. Educational theory can apply this volitional concept of psychological reality to the moral sphere of social life.—*H. Beaumont* (Kentucky).

6452. **Boon, G. Initiation générale aux idées decrolyennes et essai d'application dans l'enseignement primaire.** (General introduction to the Decroly concepts and attempt to apply them in primary teaching.) Vossegat-Bruxelles: Centre Nat. Educ., 1937. Pp. 122. 3 belg. fr.—Part I contains a collection of publications (several of which are now out of print) which still form the basis of the Decroly method. In Part II Boon develops a practical program, based on associated ideas, for use in primary schools.—*R. Piret* (Liége).

6453. **Buckingham, B. R. Arithmetic as a contribution to a liberal education.** *Elem. Sch. J.*, 1939, **39**, 577–583.—*P. Witty* (Northwestern).

6454. **Buswell, G. T. Visual outline of educational psychology.** New York: Longmans, Green, 1939. Pp. 106. $0.75.—An outline including basic factors, mental growth and development, the learning process, mental abilities and individual differences, and motivation and adjustment. The learning process is given the most space.—*S. A. Kirk* (Milwaukee).

6455. **Chavigny, P. Pédagogie générale. Les changements de clavier.** (General pedagogy. The changes of keyboard.) *Ann méd.-psychol.*, 1939, **97**, Part 2, 157–178.—In learning to use different makes of typewriters with slightly different keyboards, the subject should not compare the new with the old, but merely practice the necessary movements until they become automatic. Then he has different patterns which are set off by the sight of the particular typewriter. Similarly in music, the musician learns to transpose or change from one instrument to another quite automatically without having to stop and think of differences. Foreign languages should likewise be learned directly and not as translations. Then one can change from one language to another as easily as changing keyboards.—*M. B. Mitchell* (Mt. Pleasant State Hospital, Iowa).

6456. **Costa, A. Cenni statistici sulla visita medica agli alunni nel R. Istituto Tecnico Industriale P. Delpiano di Torino.** (Statistics concerning the medical examination of students at the Delpiano Technical Industrial Institute in Turin.) *Arch. ital. Psicol.*, 1938, **16**, 146–149.—A report of the results of the periodic medical examinations prescribed by law for the technical schools in Italy. Omitting the psychotechnical findings (to be reported later), this paper covers the medical survey of 640 students in a school in Turin. Of the 261 boys found defective in some way, 52% had inadequate vision, 5% defective hearing, 5% dental troubles, 4% heart disorders, 1% pulmonary diseases, 15% disturbances of the urinary tract, and in 18% of the cases the general condition was below par.—*H. Beaumont* (Kentucky).

6457. **Crissy, W. J. E., & Daniel, W. J. Vocational interest factors in women.** *J. appl. Psychol.*, 1939, **23**, 488–494.—The Thurstone centroid factorial procedure was applied to the intercorrelations between the scores made by women on the Strong vocational interest blank. Both differences and similarities could be noted between the factors which can account for the interests of women and those presented by Thurstone to account for the interests of men.—*E. E. Ghiselli* (California).

6458. **Dean, C. D. Predicting first-grade reading achievement.** *Elem. Sch. J.*, 1939, **39**, 609–616.—5 first-grade classes in Billings, Montana, provided subjects for a study of reading readiness. The author concludes that mental age is superior to score on reading readiness tests in predicting first-grade reading success, that the relationship of condition of vision to success is extremely low, and that the mental age required for successful reading is 6 years 6 months.—*P. Witty* (Northwestern).

6459. **Detchen, L. College education without high-school graduation.** *Sch. Rev.*, 1939, **47**, 182–191.—This paper reports the results of an educational experiment in which 13 students who had completed 3 years of high school instead of the customary 4

were admitted to the University of Louisville. The students selected for admission all made scores above the 50th percentile in performance on a battery of tests administered to freshmen. Each of these students was matched for sex and for standing in the placement tests with an individual of a control group, and the two groups were compared after 4 college years. Comparisons, which are generally favorable to the experimental group, are made of the programs in the freshman year, quality point standing, ratings in National sophomore tests, participation in extra-curricular activities, opinions of parents, and student opinion.—*R. M. Gagné* (Brown).

6460. **Dickey, J. W. Arithmetic and Gestalt psychology.** *Elem. Sch. J.*, 1938, **39,** 46–54.—A summary of the literature with recommendations for teaching.—*P. Witty* (Northwestern).

6461. **Eidelberg, L. Die Wirkungen der Erziehungsgebote.** (The effects of pedagogical commands.) *Int. Z. Psychoanal. Imago*, 1939, **24,** 281–291.—A pedagogical command is defined as a device which offers the individual the opportunity to satisfy a drive but at the same time injures his narcissistic self-respect. Children's reactions to such commands may be of three types. Some show a certain indifference, submitting to the environmental suggestion with some sign of protest, while the "good" child accepts it without questioning and the "bad" child objects energetically and refuses to obey. This parallels the neurotic behavior of adults in their attempts to avoid lowering their narcissistic self-respect. Parents and analysts should keep in mind these different reaction forms when issuing commands to children and to adult patients.—*H. Beaumont* (Kentucky).

6462. **Eskridge, T. J., Jr. Growth in understanding of geographic terms in grades IV to VII.** *Duke Univ. Res. Stud. Educ.*, 1939, No. 4. Pp. x+68. $1.00.—The processes by which children acquire and enrich meaning content for geographic terms were investigated by administering 5 types of tests to approximately 800 children. In these tests, which were essay, multiple-choice, identification, intelligence, and concrete-material types, geographic terms were incorporated which had been selected because of frequency in use. The analysis of these test data revealed 6 rather closely related factors which condition growth in understanding of the geographic terms used: amount of experience, kind of experience, level of geographic attainment, ways in which meanings of terms are verbalized, mental age, and sex. Growth in understanding proceeds: (1) through an increase in the number of different kinds of meanings, (2) through an increase of general information, (3) through a substitution of basic for associated meanings, (4) through a development of comprehensive meanings, and (5) through a reduction of errors (such as those involving confusion of terms with similar sounds, confusion of positions, applications of old meanings to new situations, and "other causes").—*D. Bailey* (Mary Baldwin College).

6463. **Fernald, G. M. A study of specific traits in cases of alexia.** *Psychol. Bull.*, 1939, **36,** 509.—Abstract.

6464. **Fischer, G. H. Über psychologische Vorfragen organischer Erziehung.** (Psychological premises of organic education.) *Z. pädag. Psychol.*, 1939, **40,** 183–188.—A discussion of the results and tendencies of the newer work on organic education. The norms of reality in the service of the folk are embodied in the home, school, youth organizations, work service, the army, and political organizations. The educator's example is the decisive factor in organic education, and for this psychological anthropology and characterology are indispensable. Fischer takes up totalitarian Anlagen, both physical and mental, "hereditary radicals," and the laws of rhythmical development. The basic principle of organic education, in its specific phases, demands a predominance of "let grow" in the building-up phases and "lead" in the transitions.—*M. E. Morse* (Baltimore).

6465. **Foster, C. R., Rudy, H. E., & Dowd, F. N. Mental hygiene in New Jersey schools; an inquiry into the influence of mental hygiene concepts on New Jersey school practice.** New Brunswick: Rutgers University, 1939. Pp. 104. $1.00.—Examination of replies from 124 New Jersey communities to a questionnaire concerning mental hygiene procedures indicated that: (1) most elementary schools do not obtain developmental data about pupils entering school; (2) most elementary school teachers do not know the religious affiliations or habits of their pupils; (3) adequate attention is not given to pupils preparing for manual or technical vocations; (4) 9 school systems employ a full time psychologist; (5) 71% of the schools report "no information" about sex habits and information possessed by pupils; (6) tests of personality and social attitudes are scarcely used at all in elementary and high schools. A description of actual mental hygiene practices in 8 communities is given, followed by tabulated summaries of the questionnaire returns. A chapter deals with implications and suggestions arising from the study.—*P. S. de Q. Cabot* (Simmons).

6466. **Gates, A. I., Bond, G. L., & Russell, D. H. Methods of determining reading readiness.** New York: Bureau Publications Teachers' College, Columbia Univ., 1939. Pp. 55. $0.60.—A large number of tests, ratings, examinations, and appraisals were applied to each pupil in 4 large New York City classes shortly after they entered the first grade. Most of these tests were repeated at mid-term and at the end of the year. A series of standardized reading tests was given at the end of each semester. The present study is based upon correlational analysis of these data and upon comparisons of the scores of slow learners with the mean scores of the total group. Comparisons are also made with the results obtained from a similar study of children in the Horace Mann School. Among other conclusions the authors state: "Reading readiness . . . is something that children have ac-

quired in varying degrees; it is something to be taught and not a series of attributes for the development of which a teacher can do nothing but wait."—*M. Keller* (Butler Hospital).

6467. **Gates, A. I. An experimental evaluation of reading readiness tests.** *Elem. Sch. J.*, 1939, **39**, 497–508.—Reading readiness tests give, on the whole, "satisfactory" predictions of reading at mid-year. Varied needs shown by readiness tests point to the necessity for individual guidance. The importance of the pupils' knowledge of letters is emphasized.—*P. Witty* (Northwestern).

6468. **Gates, A. I., & Russell, D. H. Types of material, vocabulary burden, word analysis, and other factors in beginning reading.** *Elem. Sch. J.*, 1938, **39**, 27–36; 119–129.—9 classes containing 354 pupils in four New York City schools were employed to determine "the effects of differences in the total size of the reading vocabulary, in the type of material read, in the amount of work-type material employed, in the amount and character of 'phonics' or word analysis and word-study games, and in other features of the program."—*P. Witty* (Northwestern).

6469. **Georgescu, I. Universitatea muncii.** (The university of labor.) *J. Psihoteh.*, 1938, **2**, 1–14.

6470. **Good, C. V. Selected bibliography on the methodology of educational research and related problems, 1938–1939.** *J. educ. Res.*, 1939, **33**, 62–80.—A selected bibliography of 368 titles appearing between July 1, 1938, and July 1, 1939, arranged under the headings: (1) problems, issues and trends; (2) sources of information; (3) collecting, analyzing, interpreting, and reporting data; and (4) evaluation of research and educational procedure.—*S. W. Fernberger* (Pennsylvania).

6471. **Goodenough, F. L. Selected references on preschool and parental education.** *Elem. Sch. J.*, 1939, **39**, 539–549.—63 annotated references are included.—*P. Witty* (Northwestern).

6472. **Gray, W. S., & others. Selected references on elementary school instruction. II. The subject fields.** *Elem. Sch. J.*, 1938, **39**, 129–147.—Annotated references of studies in each subject area of the elementary school.—*P. Witty* (Northwestern).

6473. **Hayes, S. P. What do blind children know?** *Teach. Forum (Blind)*, 1938, **11**, 22–32.—This article stresses the need for periodic testing of blind children to determine grade placement. Sangren information tests were given to young children, who were found about equal to sighted subjects except in nature study; the blind subjects were better than sighted children in language and literature, and about equal in social science. The Pressey test of practical information was given to 567 blind pupils. The subjects fell below sighted pupils in general information. On the Stanford achievement test the blind were about equal to sighted pupils except in arithmetic computation. The Sones-Harry school achievement and Otis-Orleans standard graduation examination were suggested as possible substitutes for examinations in elementary schools. Surveys of the blind show that they are about two grades below sighted subjects, in general. Studies are needed to show where the greatest need exists for enrichment and for supplementing school life and experiences in blind children.—*S. S. Hawk* (Southern California).

6474. **Held, O. C. Psychological rating of University of Pittsburgh honor graduates.** *J. appl. Psychol.*, 1939, **23**, 527–528.—Of 116 students who graduated with honors from the University of Pittsburgh only 6 ranked below the 50th percentile on the American Council psychological examination. A relationship was found between extent of honors achieved and test score.—*E. E. Ghiselli* (California).

6475. **Held, O. C. Does NYA work affect the academic record of college students?** *Sch. & Soc.*, 1939, **50**, 192.—151 NYA students in the College of Liberal Arts at the University of Pittsburgh were matched with students of the same percentile rank in the American Council psychological examination and the same year in college. The mean quality-point averages were computed for the experimental and control groups. The difference found, in favor of the former, was too small to be statistically reliable. The conclusion is that NYA work does not affect the academic work of this group.—*M. Lee* (Chicago).

6476. **Hische, W. Psychologische Pädagogik.** (The psychology of education.) *Z. pädag. Psychol.*, 1939, **40**, 161–182.—A theoretical discussion of the necessity for a new formulation of the relation between psychology and education. The sole purpose of psychology is to meet the needs of the folk. There is no distinction between general and applied psychology; it is a totality. Hische discusses the psychological principles of education through work. The results are human value, respect, comradeship, and pride in work. "Obviously these principles apply only to Germans. Otherwise it is difficult to see why they should be enunciated. The question whether they apply also to other peoples, who have different Anlagen, betrays an outworn intellectualism and answers itself. German science serves the German people, and this is especially true of psychology, which cannot be international."—*M. E. Morse* (Baltimore).

6477. **Hites, L. T. The marriage course as a psychology department offering.** *Sch. & Soc.*, 1939, **50**, 119–120.—*M. Lee* (Chicago).

6478. **Johnson, D. G., & Willey, M. M. Backgrounds of college NYA students.** *Sch. & Soc.*, 1939, **50**, 252–256.—At Minnesota, the first college where federal help was given college students, an analysis was made of the backgrounds of 4681 students who have received aid during 17 quarters. 71% were men, as against 57% in the college as a whole. 48% are from homes with 4 or more dependents. 69% are from homes where the income is less than $1500 a year and 44% from homes where it is less than $1000. In 18% the breadwinner is unemployed, on WPA, or on relief. 43% of parents had fixed charges of less than $100. The modal duration of appointment is 3 academic quarters and there is no evidence of dependence developing

The above findings make apparent the function that NYA assistance is performing in preserving democratic education in America.—*M. Lee* (Chicago).

6479. **Kelly, G. A. The place of the psychologist in the small school system.** *Proc. Ind. Acad. Sci.*, 1939, **48**, 183.—Abstract.

6480. **Kelty, M. G. Reading the materials of the skill studies in the middle grades.** *Elem. Sch. J.*, 1939, **39**, 337–351.—A consideration of the reading process in relation to successful teaching of the social studies. The complexity of failure is emphasized.—*P. Witty* (Northwestern).

6481. **Kvaraceus, W. C. Intelligence testing in the first grade.** *Elem. Sch. J.*, 1939, **39**, 690–691.—"Test results interpreted in terms of percentile rank . . . are perhaps the most valid and reliable measure for use in the first grade."—*P. Witty* (Northwestern).

6482. **Kvaraceus, W. C., & Wiles, M. E. An experiment in grouping for effective learning.** *Elem. Sch. J.*, 1938, **39**, 264–268.—The authors discuss an achievement-ability grouping experiment conducted in the second grade; on the basis of test scores growth in academic achievement per pupil in the experimental group was more than the average amount of pupil growth during the year.—(Courtesy *J. educ. Res.*).

6483. **Lawton, G. The educational credo of a mental hygienist.** *Sch. & Soc.*, 1939, **50**, 151–153.—Mental hygiene implies a philosophy of both education and life itself. Believing that a statement of this credo has value as a frame of reference for educators, the author gives 39 articles or basic assumptions, among which the following are emphasized: The purpose of a school is primarily to develop personality and desirable emotional and social attitudes toward life as a whole. To this end understanding of one's self and one's limitations is desirable and essential to the understanding of others. Teachers may increase the range and significance of a pupil's experience, but they are themselves human beings, superior only in wisdom and information to their pupils, and experiencing with them the pleasure and profit of their mutual association as well as their common mystical association with the true teacher—an abstraction of ideas and emotions generated by the class.—*M. Lee* (Chicago).

6484. **Lehman, H. C., & Stoke, S. M. A workbook in educational psychology.** New York: Prentice-Hall, 1939. Pp. x+150. $0.80.—A series of practical problems to be used in connection with the more formal textbook work in the course in educational psychology. The aim of the book is to acquaint the student, through the presentation of problems in real situations, with the fact that educational psychology is a growing body of information rather than a static store of facts and principles. The problems consist of situations in the fields of heredity and environment, motivation, individual differences, maturation, learning, and individual maladjustments. After each problem is a list of questions which call for an evaluation of the data presented in the problem. Also at the end of each problem is a list of references containing a comprehensive treatment of the situation. Each reference contains a suggested reading list for further study. A reading list is given at the beginning of the workbook to parallel the workbook topics in the theoretical field. A bibliography of books and periodicals is given at the conclusion of the problems. The authors are of the opinion that class discussion is essential for the proper evaluation of the quantitative data presented for the individual student.—*P. Brand* (New York City).

6485. **Marzolf, S. S. "Guidance" brings confusion.** *Sch. & Soc.*, 1939, **50**, 244–246.—The concept of guidance as orienting school experiences about the needs of the total child and developing his abilities in relation to his life goals is identical with the modern concept of education. There is a tendency to restrict the new concept to guidance courses and guidance experts, leaving the old curriculum unmodified in its aims. This compartmentalization of thinking and practice results in great confusion in the minds of teachers, much of which would be avoided if the word "guidance" were dropped and its practice incorporated into all subjects taught, except in so far as it involves the services of a highly trained expert.—*M. Lee* (Chicago).

6486. **McLaughlin, K. L. Selected references in kindergarten-primary education.** *Elem. Sch. J.*, 1939, **39**, 623–628.—Selected and annotated are 39 studies.—*P. Witty* (Northwestern).

6487. **Meek, L. H. Influences on emotional growth inherent in the teacher's function. III. Preparation of teachers for the emotional guidance of children.** *Amer. J. Orthopsychiat.*, 1939, **9**, 494–503.—The author is interested in the problem of how to select teachers who are equipped to use the experience in the classroom as an opportunity for influencing the personality development of children. She believes that students of teacher-training institutions should be selected on the basis of their own personality development and adjustment and should be trained by having a wide range of experiences with children of various ages, both individually and in groups. The fundamentals of teaching to be learned through experiences with children are: (1) to be at ease, relaxed, informal; (2) skill in recognizing, discovering, and interpreting individual needs; (3) how to be flexible in guidance and teaching. It is also important for teachers in training to have enriching life experiences, a more fundamental understanding of the world in which they live, some sort of creative experience, and a measure of satisfying relations with their peers. These things will make them not only happier people but better teachers.—*R. E. Perl* (New York City).

6488. **Mercer, M. Predictive value of college admissions data.** *Psychol. Bull.*, 1939, **36**, 547.—Abstract.

6489. **Meyer, M. F. The origin of objective examinations.** *Sch. & Soc.*, 1939, **50**, 246–247.—It is often asserted that objective tests in school subjects were first introduced into American elementary schools, then into high schools, and finally into colleges. As a matter of fact they were first used in America at the University of Missouri in 1908, when completion tests, originated in Germany by Ebbinghaus, were given to psychology students by the author.—*M. Lee* (Chicago).

6490. **Moede, W. Leistungs- und Ausdrucksprinzip bei der Eignungsbegutachtung.** (Performance and expression principles in vocational guidance.) *Forsch. Fortschr. dtsch. Wiss.*, 1938, **14**, 393–395.—*P. L. Krieger* (Leipzig).

6491. **Meyers, C. R. Toward mental health in school.** Toronto: Univ. Toronto Press, 1939. Pp. vi+151. $1.50.—This book is written for teachers in recognition of the necessity for an understanding of a child's mental health in directing his education. The aims are to provide in non-technical terms certain essential factual information about mental disease and to discuss mental-health difficulties of normal children. The contents are divided into two major parts of 7 chapters each: I. Toward mental health—introduction; facing facts; false notions; mental defect, a minor problem; mental defect, proposed solutions; mental disease, the major problem; preventing mental illness. II. In school—the unsociable child; the model child; the defensive child; the nervous child; the emotional child; the role of the teacher; the health of the teacher.—*D. G. Ryans* (William Woods College).

6492. **Nash, B. A. Corrective reading in college.** *Psychol. Bull.*, 1939, **36**, 548.—Abstract.

6493. **Osborn, L. G. A scale for measuring the relative difficulty of high-school subjects.** *J. educ. Res.*, 1939, **33**, 1–6.—The scale consists of a questionnaire of 31 questions indicating different degrees of difficulty. Ratings are given for 31 high-school subjects, of which algebra and chemistry were the most difficult and clothing and woodwork the least difficult, were obtained from 8785 pupils in 9 different secondary schools and taught by 363 teachers, who co-operated in the study.—*S. W. Fernberger* (Pennsylvania).

6494. **Preston, M. I. The reaction of parents to reading failures.** *Child Develpm.*, 1939, **10**, 173–179.—100 reading failures with average English vocabulary, normal intelligence, and no noticeable physical defects were chosen from grades 2 to 10. Parents and children were interviewed. The children's security tends to be destroyed by the emotional reactions of the parents to reading failure. Illustrative cases and statistical analysis of parental reactions show "intolerance toward reading failure. The parents described their attitudes in terms of anxiety, despair, annoyance, anger, disgust, mortification and desperation and placed the blame on the child in the majority of the cases." Expert supervision should be provided for the teaching of beginning reading.—*C. N. Cofer* (Brown).

6495. **Risen, M. L. Relation of lack of one or both parents to school progress.** *Elem. Sch. J.*, 1939, **39**, 528–531.—Of the 1625 pupils who answered the author's questionnaire, about one seventh lack one or both parents in the home; and it appears, in the school studied, that the lack of one or both parents in the home affects the child's IQ unfavorably, increases the amount of overageness, increases the number of failures in school subjects, decreases the likelihood of the child's becoming a leader in the school community, increases his chance of becoming a special problem case for the school counselor, and has some slight effect on health.—(Courtesy *J. educ. Res.*).

6496. **Ross, E. H. Influences on emotional growth inherent in the teacher's function. II. The classroom as a setting for the fulfillment of a function.** *Amer. J. Orthopsychiat.*, 1939, **9**, 477–494.—The author discusses modern private schools under the following topics; authority relations, composition of experimental schools, experiments in administration, attitudes about sex, work in the arts, relation to public schools, relation to psychiatrists. Schools have learned that if children are to live their lives fully, it behooves the adults to define some standards, and to help the children achieve some pattern within which they can function. "However, they still believe that children and adults learn best and most when they are free to grapple with people, ideas, materials in the raw."—*R. E. Perl* (New York City).

6497. **Ryan, W. C. Influences on emotional growth inherent in the teacher's function. I. What is the teacher's function?** *Amer. J. Orthopsychiat.*, 1939, **9**, 468–477.—This paper is one of three in a symposium on certain phases of mental hygiene in education. Teacher selection and teacher training are most important problems facing modern education. If schools are to concern themselves in any effective way with all-around individual and community experiencing on the scale now desired by progressive educators, they will have to receive help from other agencies in the community. Here is an area in education which needs the help of every organization that has to do with the subtler aspects of the developmental process we call education.—*R. E. Perl* (New York City).

6498. **Sainviteux, J. Contribution expérimentale à l'étude de la fatigue mentale et de l'économie du travail scolaire.** (Experimental contribution to the study of mental fatigue and economy of scholastic work.) *Cah. Pédag., Univ. Liége*, 1938, **4**, 95–101; 1939, **4**, 154–162.—(I) In order to measure scholastic fatigue, the author gave 789 students from a homogeneous rural community (445 boys and 344 girls, aged 7 to 14) two series of tests on consecutive days, sometimes in the morning and sometimes after the afternoon class period. The test lasted 17 minutes and consisted of three pages of text in which the subject had to underline in different ways the sounds which changed from one page to another. No statistically reliable average differences were found between the morning and afternoon periods

as to diminution in output. Only on Saturdays was there found a general decline in the curves, but this was thought to be due to a lack of interest in the tasks on those afternoons and not to physiological fatigue. Girls were consistently superior, but this was ascribed to a greater voluntary interest on their part. In general, no correlation was found between scholastic fatigue as measured by these methods and physical development (Pignet index) or intelligence (group test method). (II) Further tests were made (707 students in the arithmetic series, and 53 boys in the 5th and 6th grades for the other tests) at different times of the day and on different days. The tests consisted of exercises in spelling, arithmetic, copying, grammar, phraseology, and poetry memorizing, the test period being either 5 or 10 minutes in duration. Yield in the afternoon periods was less than in the morning ones. The optimum yield varied with the material, hour of the day, and age. Sex, intelligence, and physical development seemed to have little effect. However, the individual curves did not agree with the average curves. Contradiction between these results and those obtained in the earlier paper is explained by the factor of interest. Main conclusions are: (1) the second method of measuring scholastic work by drawing a work curve is more apt to disclose scholastic fatigue; and (2) the affective element of interest, regardless of stimulus, may counteract the effect of fatigue.—*R. Nihard* (Liége).

6499. **Sears, P. S. Levels of aspiration in academically successful and unsuccessful children.** *Psychol. Bull.*, 1939, **36,** 539–540.—Abstract.

6500. **Seashore, R. H. Further data on the measurement of general English vocabularies.** *Psychol. Bull.*, 1939, **36,** 525.—Abstract.

6501. **Sisisky, F. The later social adjustment of a group of borderline defective delinquents trained at the Oaks School.** *Smith Coll. Stud. soc. Work*, 1939, 10, 36–49.—The Oaks School is one of the few institutions in which juvenile delinquents of borderline intelligence are trained, supervised, and studied. Its aim is to develop in the boys a sense of responsibility to one another and a desire to become socially acceptable, and to develop their abilities so that they may become self-supporting. This study is a follow-up investigation of 20 boys 5 to 7 years after they left the school. "Given institutional training adapted to their emotional and intellectual needs, it would appear that perhaps as many as fifty per cent of seriously delinquent boys of borderline defective intelligence can later make a good adjustment in the community. Not only does that seem to be true, but it has been shown that a well-trained staff can predict very accurately which boys out of a group will become well adjusted and what conditions must be met to help them make such an adjustment."—*K. S. Yum* (Chicago).

6502. **Strong, R. Examiner's reading diagnostic record for high school and college students.** New York: Bur. Publ., Teach. Coll., Columbia Univ., 1939. Pp. 1+19. $0.25.—This is a record blank to be used in diagnostic interviews with students suffering from reading difficulties. Space is provided for identifying data, summary of results of standardized tests, summary of scholastic achievement, medical examination, developmental and educational history, present reading interests, other interests and activities, present reading status, and performance on four oral reading passages. An accompanying manual describes the use of the record blank in detail.—*M. Keller* (Butler Hospital).

6503. **Strong, E. K. Significance of the point of reference.** *Psychol. Bull.*, 1939, **36,** 548.—Abstract.

6504. **[Various.] Sex education: a re-evaluation.** *Child Study*, 1939, **16,** 83–97.—This symposium represents the points of view of several specialists in education, child study, medicine, marriage relations, public health, and eugenics. The confusion arising in the swing from "strict silence" to "uncritical frankness" and elaborate scientific physiological and biological details is discussed as to its effect on children and their sex problems. Lack of enlightenment regarding the true nature of a child's sexuality and sex interests has resulted in unpreparedness for this educational task. Recent attempts at a new approach based on such enlightenment and understanding of the child's gropings must be carefully evaluated in terms of best development of a capacity for a subsequent responsible adult love relation, as well as for their informative adequacy in the present. Reassurance is needed that the various phases through which individuals pass are normal and common to every one.—*D. Bailey* (Mary Baldwin College).

6505. **Wilson, F. T., & Fleming, C. W. Symbols scales for use in beginning reading.** *J. Psychol.*, 1939, **8,** 99–114.—A detailed description is given of the content, development, and usefulness of the Symbols Scales, a test which makes possible an objective measurement of pupils' mastery of various letter abilities, found to be closely correlated with measures of reading progress. The Symbols Scales consist of the following 9 subtests: naming capital letters, naming small letters, giving letter sounds, recognizing consonant letter sounds, recognizing vowel letter short sounds, printing (or writing) capital letters, printing (or writing) small letters, writing digits, and giving phonic combinations.—*J. McV. Hunt* (Brown).

6506. **Wolf, R. R., Jr. Differential forecasts of achievement and their use in educational counseling.** *Psychol. Monogr.*, 1939, **51,** No. 1. Pp. 53.—The underlying assumption of this study was the existence of a difference in ability for verbal and quantitative types of curricula. Using the records of 1720 Yale students who entered in three different years, the author attempted to predict scholastic success from the scores of aptitude tests taken at the time of entrance. He compared the scores on a scholastic aptitude test with the grades made in verbal subjects (English and foreign languages); and he compared the scores made on a mathematical aptitude

test with the grades in quantitative studies (mathematics and the natural sciences). He found that in the freshman year three fourths of the students showed no marked differences, but that for one fourth of them "the differential predictions developed in this study correctly forecasted criterion differences approximately two out of three times." Practically no differential prediction was found to be possible for upper-class performance.—*K. F. Muenzinger* (Colorado).

[See also abstracts 6139, 6141, 6275, 6347, 6411.]

MENTAL TESTS

6507. **Anderson, L. D. The predictive value of infancy tests in relation to intelligence at five years.** *Child Develpm.*, 1939, **10**, 203–212.—In the first section of this study are reported results of comparison of infant test scores on items from Gesell, Bühler, Linfert and Hierholzer, and Anderson, made at intervals from 3 months to 5 years, with the Stanford-Binet IQ at age 5. 91 children of superior socio-economic status and intelligence were used. "An infant scale constructed only with regard to the inclusion of items which show an increasing percentage of success with age has no value in predicting intelligence as measured by tests given . . . later." At 18 and 24 months language development is "the best indication of intelligence." In the second part of the study a group of 15 5-year-olds with superior intelligence and one with inferior intelligence were selected. Infant tests were then examined with attention to performances of these groups on them, and diagnostic items for each age level up to 24 months are presented. Items at 18 and at 24 months were more discriminative than those at other ages, language items being most so. Reliability and validity coefficients were low, although validity was raised by elimination of non-significant items through item analysis. "A combination of the 3, 6, 9, 12, 18, and 24 month age test scores correlates .64 with five-year intelligence." Inclusion of parental education raised this.—*C. N. Cofer* (Brown).

6508. **[Anon.] California short form test of mental maturity.** Los Angeles: California Test Bureau, 3636 Beverly Blvd., 1939. $0.75 per 25.—This test incorporates most of the good points of the long form test and remedies some of its weaknesses. One class period suffices for administration. There are five series: pre-primary, primary, elementary, intermediate, and advanced. Three mental ages and three intelligence quotients are obtained, non-language, language, and combined. There is a pre-test of visual acuity and a diagnostic profile of the results of the test.—*M. P. Montgomery* (Faribault, Minn.).

6509. **Arthur, G. The agreement of Kuhlmann-Binet and Stanford-Binet ratings for 200 cases.** *J. appl. Psychol.*, 1939, **23**, 521–524.—As much agreement was found between the Kuhlmann-Binet and Stanford-Binet tests as is reported by Terman between two testings on the Stanford-Binet test.—*E. E. Ghiselli* (California).

6510. **Baumgarten, F. Zur Theorie der Test-Methode.** (On the theory of the test method.) *Z. Kinderpsychiat.*, 1939, **6**, 49–53.—A criticism of character tests in general on the grounds that they are indirect devices. Tramer's "catalogue test" is discussed as a new type of test which permits the discovery of the conflicts, inclinations, interest, and character of the subject by a method of direct interpretation.—*D. Shakow* (Worcester State Hospital).

6511. **Bayley, N. The predictive value of several different measures of mental growth during the first nine years.** *Psychol. Bull.*, 1939, **36**, 571–572.—Abstract.

6512. **Black, I. S. The use of the Stanford-Binet (1937 revision) in a group of nursery school children.** *Child Develpm.*, 1939, **10**, 157–171.—31 children entering nursery school secured a mean Stanford-Binet IQ of 121.7 and a mean Merrill-Palmer IQ of 115.5. The test scores on the 2 tests correlated .36 for this group. Another group of 35 with 6 months in nursery school secured IQ's of 131.2 and 129.8 on their first Stanford-Binets and Merrill-Palmers respectively, the intercorrelation of the two being .64. Retests on 27 of the first group gave a new Binet mean of 128.1 and a retest correlation of .80; and a new Merrill-Palmer IQ of 134.5, correlating .58 with the first Merrill-Palmer testing. A correlation of .94 was secured between Binets a year apart with 29 of the second group. There is an extended discussion of the use of the Stanford-Binet as a preschool test.—*C. N. Cofer* (Brown).

6513. **DuBois, P. H. A test standardized on Pueblo Indian children.** *Psychol. Bull.*, 1939, 36, 523.—Abstract.

6514. **Flanagan, J. C. Measuring interests.** *Psychol. Bull.*, 1939, **36**, 529–530.—Abstract.

6515. **Harrell, W. A factor analysis of mechanical ability tests.** *Psychol. Bull.*, 1939, **36**, 524.—Abstract.

6516. **Manoil, A. Asupra testului de baraj.** (The barrage test.) *J. Psihoteh.*, 1938, **2**, 26–29.

6517. **Meili, R., & Daiu, M. Expériences sur la signification des tests d'attention.** (Experiments on the significance of attention tests.) *Arch. Psychol., Genève*, 1939, **27**, 113–133.—A new technique yielding a work curve is proposed for the Toulouse and Piéron cancellation test. This curve is very helpful in an interpretation of the results obtained from this test, the significance of which is not yet very clear. Correlation with a number of other tests, which are in part very similar, is very slight, and the authors have not yet succeeded in giving an adequate explanation of this fact.—*R. Meili* (Geneva).

6518. **Munson, G., & Saffir, M. A. A comparative study of retest ratings on the original and the revised Stanford Binet intelligence scales.** *Psychol. Bull.*, 1939, **36**, 524–525.—Abstract.

6519. **Rock, R. T., Jr., & Wesman, A. The comparative efficiency of various methods of weighting interest test items.** *Psychol. Bull.*, 1939, **36**, 569–570. —Abstract.

6520. **Shakow, D., & Pazeian, B. Adult norms for the K-S clinical formboards.** *J. appl. Psychol.*, 1939, **23**, 495–502.—Norms and a scoring system for the Kent-Shakow clinical formboards are presented for average and superior adults of both sexes.—*E. E. Ghiselli* (California).

6521. **Wrightstone, J. W. Appraisal of tests and measures for young children.** *Childh. Educ.*, 1939, **15**, 252–257.—The problems of measuring young children include the child's inability to express in writing his attitudes, interests, concepts, and knowledge. Further improvement is needed in even the most successful psychological measuring techniques, such as the interview, rating scale, judgment scale for child productions, controlled observation techniques, anecdotal records, stenographic reports, and photographic evidence. Specific tests are discussed and criticized, with special emphasis on improvements in reading tests.—*D. Bailey* (Mary Baldwin College).

[See also abstract 6137.]

CHILDHOOD AND ADOLESCENCE

6522. **Acqua, M. [Beginnings of human personality.]** *Med. infant.*, 1938, **9**, 81.—Acqua deals with psychological observations made on children from birth to the age of 6 years. The section headings indicate the following topics: (1) the first smile and the first word, (2) the first word adapted to an object and the first phrase, (3) the thought and the first influence of education, (4) the process of memory, (5) the consciousness of personality, and (6) the gesture.—(Courtesy *Child Develpm. Abstr.*).

6523. **Adler, D. L. The substitute value of activities for children of different age levels.** *Psychol. Bull.*, 1939, **36**, 570–571.—Abstract.

6524. **Arrington, R. E. Time-sampling studies of child behavior.** *Psychol. Monogr.*, 1939, **51**, No. 2. Pp. 193.—The purpose of this study was "to test the applicability of an observational recording technique to different age levels and to situations differing in structuralization, and to describe characteristic individual patterns of involvement in, or withdrawal from, active contact with materials and with persons." Systematic observations were made of 120 children by means of the time-sampling method of controlled observation. The samples for each child were distributed as regularly as possible over a period of several months. The results showed, among many other details, that "the language data revealed clear-cut developmental patterns but the physical contact records showed no evidence of a relationship between age and the frequency of the behavior. There was a definite increase with age in the amount of speech addressed to other children accompanied by decreases in speech to adults and nonsocial speech. Verbal contacts predominated over physical in all age groups, the youngest group having the highest proportion of physical contact. Children addressed their conversation predominantly to children of the same sex. The talkative children tended to remain talkative, the non-talkative to remain infrequent talkers." The author concludes that the technique used "still attempted to cover too much ground" and gave less satisfactory results than had been anticipated.—*K. F. Muenzinger* (Colorado).

6525. **Bender, L. Mental hygiene and the child.** *Amer. J. Orthopsychiat.*, 1939, **9**, 574–583.—Children need a great deal more love and warmth from the world and from adults than we are accustomed to giving them. This concept of the love need of the child is discussed in terms of his gastro-intestinal activity, the elimination process, curiosity, and fear. On the children's ward at Bellevue Hospital a routine is adopted whereby each child is given as much attention and demonstration of affection as possible. Children are not spoiled by affection and attention but by infantile parents who indulge themselves by giving the child attention when it pleases them and holding it back when it displeases them, who do not consider the child's developmental needs, and who admire the child not for its own sake but for theirs.—*R. E. Perl* (New York City).

6526. **Boynton, P. L. The relationship of hobbies to personality characteristics of school children.** *Psychol. Bull.*, 1939, **36**, 538–539.—Abstract.

6527. **Brander, T. Einige psycho- und neuropatische Züge bei frühgeborenen Kindern im Schulalter.** (Some psychopathic and neuropathic tendencies in prematurely born children of school age.) *Z. Kinderpsychiat.*, 1939, **6**, 53–57.—Conclusion of the author's report on 376 prematurely born children aged 7 to 15. He finds various forms of pathology among them. In some symptoms there appears to be a relationship with birth weight.—*D. Shakow* (Worcester State Hospital).

6528. **Brumbaugh, F. N. Stimuli which cause laughter in children.** New York: (Ph.D. Diss.), N. Y. Univ., 1939.—A report of a study of laughter in 1600 pupils of grades 3 to 6, inclusive, in the New York City public schools. Results from a questionnaire and check list were compared with anecdotal records of instances of laughter in classrooms, kept by trained observers. The conclusions are: (1) The preferences of these children were for comedy that lacks the approval of those most concerned with the education of children; (2) visual and auditory stimuli which appeared incongruous were most likely to produce laughter; (3) the teacher was the greatest determining factor in the amount and kind of laughter that took place; (4) group laughter occurred more frequently than individual laughter in all grades; (5) individual variation in the frequency of laughter heard was greater than variations attributed to the different sexes or ages of the pupils; (6) the relationship of intelligence to appreciation of humor was apparent in the recognition of absurdities by bright pupils; (7) the trend of develop-

ment in appreciation of humor drops in the 5th grade, rises among 6th-grade boys, remains low among 6th-grade girls; (8) the greatest variations in humor appreciation appeared in the 6th grade, with boys surpassing girls; (9) more originality was shown in the humorous drawings of boys than in those of girls. The educational implications of these findings are discussed.—*R. M. Gagné* (Brown).

6529. **Burlingham, D. T. Phantasie und Wirklichkeit in einer Kinderanalyse.** (Imagination and reality in a child analysis.) *Int. Z. Psychoanal. Imago*, 1939, **24,** 292–303.—Daydreams play a most important part in the analysis of children between the ages of 6 and pre-adolescence. Unconscious events are less clearly expressed in their play activities than in that of younger children, and they do not object to relating their flights of imagination as do adolescents. Though daydreams cannot be analyzed precisely like real dreams, their origin is usually quite apparent and involves a restless repressed desire connected with a daily event in the child's recent experience. In addition there is the tendency to derive elements for the building of fantasies from a beloved person like the mother on the basis of the child's unconscious identification with her. A case history illustrates the manner in which the development of a neurosis can be traced in a child's imaginational thinking.—*H. Beaumont* (Kentucky).

6530. **Cameron, W. J. The clubhouse project in the California adolescent study.** *Psychol. Bull.*, 1939, **36,** 556–557.—Abstract.

6531. **Campbell, H. M. Differences in clique formation among adolescent boys and girls revealed by a "guess who" technique.** *Psychol. Bull.*, 1939, **36,** 537.—Abstract.

6532. **Clothier, F. Some aspects of the problem of adoption.** *Amer. J. Orthopsychiat.*, 1939, **9,** 598–616.—The history of adoption and the development of adoption laws are here described. Several case histories are given to show that the age-old institution of adoption still presents problems. "We have gone a long way towards solving some of the legal and technical problems, but the dynamic and emotional problems remain only partially formulated. In those cases where they are solved, it seems to be by intuition rather than by benefit of science."—*R. E. Perl* (New York City).

6533. **Durkin, H. E. Dr. John Levy's relationship therapy as applied to a play group.** *Amer. J. Orthopsychiat.*, 1939, **9,** 583–598.—This is an account of the application of the therapy to a group of 8 preschool children who convened daily from 9 to 12 a.m. for 2 months. After describing the therapy, the author discusses the advantages and disadvantages of group therapy as opposed to individual therapy. The progress of one member of the group is described in great detail as an illustration of the method used. It is concluded that this method may be the basis of a new and far more effective nursery-school technique.—*R. E. Perl* (New York City).

6534. **Feige-Seiffert, G. Farbkenntnis und Farbverwendung bei Kindern des ersten Grundschuljahres.** (The knowledge and use of colors among first-grade children.) *Z. pädag. Psychol.*, 1939, **40,** 189–197.—The choice of a given color remained the same in repeated experiments, and was, in order, for a bright, dull, and dark shade. The preferences of the girls were more decided than those of the boys. In combining colors, the children usually contrasted a bright with a dark color. The boys showed more variety in combination, and preferred brown or black much oftener than the girls. Children's taste in colors is much less primitive and more akin to the adult's than is generally assumed.—*M. E. Morse* (Baltimore).

6535. **Gesell, A. Reciprocal interweaving in neuromotor development.** *J. comp. Neurol.*, 1939, **70,** 161–180.—Analyses of cinema records of developing infants show that the zones of greatest change in functional and structural development are constantly progressing along a spiral course. By virtue of this, progress in the development of specific patterns of behavior may become temporarily arrested but may later on continue on the course that is characteristic of the species. Also, patterns of behavior which are characteristic of older stages may be displayed in a weak and transient manner for a short time, or vestiges of a past stage may be reawakened. A concept of spiral progression rather than hierarchical stratification fits the observed fact that there is a continuous process of reincorporation and consolidation of the old and the new in structural and functional organization. Gesell regards this process of reciprocal neuromotor interweaving as an all-pervasive principle of development which applies to the infra-human as well as to the human embryo.—*C. P. Stone* (Stanford).

6536. **Gibbons, C. C., & Porter, J. P. Some aspects of social adaptability among adolescents.** *J. appl. Psychol.*, 1939, **23,** 508–519.—With high school students a test of tact was found to correlate .33 with teachers' ratings and .20 with fellow students' ratings of social adaptability, and .45 with IQ. Teachers' ratings correlated .69 with students' ratings and .37 with IQ.—*E. E. Ghiselli* (California).

6537. **Günzel-Haubold, M. Seelisches Erwachen und geistiges Reifen. Lehr- und Lernbuch der Kinderseelenkunde.** (Mental development and maturing; textbook of child psychology.) Leipzig: J. Klinkhardt, 1939. Pp. 147. RM. 2.80.

6538. **Haups, J. Das Schwärmen des sittlich verwahrlosten weiblichen Fürsorgezöglings als Erziehungsaufgabe.** (The crushes of morally neglected girls in charitable institutions as a pedagogical problem.) Luzern: Institut für Heilpädagogik, 1938. Pp. 98. Frs. 3.80.—Crushes may be utilized for educational purposes by transforming them into a pedagogically desirable relationship through creating confidence, giving the child attention which shows genuine interest, and attempting a constructive understanding. Such relations may then be further employed to build up religious and moral

foundations, life ideals, and self-realization of the individual. Portions of diaries and a bibliography are appended.—*J. Haups* (Luzern).

6539. **Hildreth, G., & Ingram, C. P. Selected references from the literature on exceptional children.** *Elem. Sch. J.*, 1939, **39**, 692–708.—Trends in 110 studies are listed and annotated.—*P. Witty* (Northwestern).

6540. **Hirsch, N. D. M. Relationship between interest, ability and self-estimated ability among maladjusted boys.** *J. abnorm. soc. Psychol.*, 1939, **34**, 395–399.—Not only are children's interests transient, but the correlation of such interests with ability is of a magnitude not generally accepted by psychologists as having much practical significance. A greater association is discovered between ability and self-estimated ability; and a fairly valuable correlation exists between self-estimated ability and the child's interest. A child's interests are, therefore, much more an index of his wishful estimate of his ability than of his real ability. This determination is true for various levels of intelligence as well as for varying chronological age groups.—*C. H. Johnson* (Portland, Ore.).

6541. **Klopper, B. Personality differences between boys and girls in early childhood.** *Psychol. Bull.*, 1939, **36**, 538.—Abstract.

6542. **Lark-Horovitz, B. On art appreciation of children: III. Textile pattern preference study.** *J. educ. Res.*, 1939, **33**, 7–35.—39 textile patterns were judged by 259 boys and 261 girls and by a specially gifted group of 26 boys and 17 girls, who were asked to answer a questionnaire after making their selection. There was a preference for three of the patterns, which persisted for all ages from 6 to 15 years and were also preferred by the specially gifted group. The boys were influenced in their choices primarily by the subjects presented and the associations aroused. The girls shared the subject interest, but "to a larger extent exhibited a more static interest—in decorative appearance which is embodied in a reality (flowers), not in an abstraction."—*S. W. Fernberger* (Pennsylvania).

6543. **Long, L. Concept formation in children.** *Psychol. Bull.*, 1939, **36**, 550–551.—Abstract.

6544. **Lucio, W. H., & Mead, C. D. An investigation of children's preferences for modern pictures.** *Elem. Sch. J.*, 1939, **39**, 678–689.—A study of children's reactions in the intermediate grades to 18 modern pictures.—*P. Witty* (Northwestern).

6545. **Macfarlane, J. W. The guidance study.** *Sociometry*, 1939, **2**, No. 3, 1–23.—A description of the objectives, points of view, and procedures of the Child Guidance Study of the University of California Institute of Child Welfare. The 252 child subjects and their families represent every third birth in Berkeley from January 1928 to July 1929, and are divided into guided and unguided (control) groups. "Panels" of investigation include prenatal data; cumulative physical records (health, anthropometrics, etc.); records of mental development; records of behavior attitudes and personality patterning as seen by parents, siblings, staff, and others, with similar data to be obtained by psychoanalytic techniques; and records of the physical and psychological environment. These data are analyzed with reference to the objectives of the study, which are: to investigate relations between behavior patterns and measures of physical status, intelligence, personality characteristics of parents, and other variables; to study in a normal group of children the incidence and characteristics of maladaptive behavior; to study the "critical differentials whereby some individuals give up or modify early infantile patterns" while others do not; to determine the effect of guidance procedures on stammering, fears, etc.; and "lastly, a more articulate and refined methodology has been sought in the field of personality investigation." The author describes the basic postulates and specific hypotheses of the investigation, and explains, with sample findings, the procedure of analysis of material within each panel, as well as of the relations of the data from different panels.—*L. J. Stone* (Vassar).

6546. **Michaels, J. J. Enuresis—a method for its study and treatment. O. H. Mowrer and Willie Mae Mowrer. A critique.** *Amer. J. Orthopsychiat.*, 1939, **9**, 629–635.—This is a criticism of the Mowrers' method for the treatment of enuresis, which method is based on an apparatus that automatically awakens the child immediately upon the commencement of urination. The main objections are: (1) the application of psychoanalytic theory without clinical psychoanalytic experience and without an awareness of medical implications; (2) the recommendation for treatment along purely mechanical lines despite acknowledgment of the child-parent relation as crucial; (3) the monosymptomatic point of view, which considers the bladder of the child to the neglect or avoidance of the total personality or the child's reaction to his bladder difficulty; (4) the definiteness of the conclusions despite the absence of controls, the small number of cases, and the lack of knowledge of the duration of the effects.—*R. E. Perl* (New York City).

6547. **Miller, W. A. What children see in pictures.** *Elem. Sch. J.*, 1938, **39**, 280–289.—The reactions of 100 elementary school children to 6 pictures are analyzed.—*P. Witty* (Northwestern).

6548. **Morgenstern, S. Le symbolisme et la valeur psychoanalytique des dessins infantiles.** (The symbolism and psychoanalytic value of children's drawings.) *Rev. franç. Psychanal.*, 1939, **11**, 39–48.—In children's drawings as well as in their games, stories, and dreams, the real content differs greatly from the manifest meaning. Only an understanding of the child's affective states, his real and imagined conflicts, and the symbolism through which he expresses these can help us in grasping the hidden significance. Especially true is this of the products of neurotic children, whose mentality resembles that of primitives and schizophrenes. Contradictory items are placed side by side, and the child's anxiety finds a fanciful outlet which is in-

comprehensible to the uninitiated. He is guided solely by his affective impulses and by his faith in the omnipotence of his thoughts.—*H. Beaumont* (Kentucky).

6549. **Peck, L. Comparative study of the character traits of young orphanage and non-orphanage children.** *Psychol. Bull.*, 1939, **36**, 567.—Abstract.

6550. **Peller, L. E. The child's approach to reality.** *Amer. J. Orthopsychiat.*, 1939, **9**, 503–514.—The children's world is very different from our own. It contains very few data about physical facts but many about emotional ones. This emotional world is very unstable even under ideal conditions. It contains all sorts of threats which we cannot remove; hence the child's fears. The child needs a reliable and stable emotional environment, and it is our task to pave the way from this childish, primitive and prelogical world to our own mental one. We must create conditions which will enable the child to anticipate what is coming next; for if he lives in surroundings where sudden, unexpected changes are continually taking place, his eagerness to get in touch with this external world will probably diminish.—*R. E. Perl* (New York City).

6551. **Peters, G. A. Visual defects of children in Indiana.** *J. Indiana med. Ass.*, 1938, **31**, 237 ff.

6552. **Reymert, M. L. Relationships between menarcheal age, behavior disorders and intelligence.** *Psychol. Bull.*, 1939, **36**, 571.—Abstract.

6553. **Roth, H. Psychologie der Jugendgruppe.** (Psychology of the youth group.) Berlin: Bernard & Graefe, 1938. Pp. 184. RM. 4.50.—This work is the first attempt to study comprehensively and scientifically the group of boys and girls 10–20 years old as it is incorporated in youth organizations. After comparison with other psychological explanations (Baden-Powell, etc.), Roth gives his own psychological theory of the yough group, which is based on an interpretation of its national-political position in the totalitarian folk structure. This position depends on the educational value of youth organizations, led by youth, on which subject Roth draws broad psychological conclusions for parents, teachers, and youth leaders.—*H. Roth* (Salzburg).

6554. **Sarvis, B. C. A study of the developmental aspects of child thought by a clinical method.** *Psychol. Bull.*, 1939, **36**, 550.—Abstract.

6555. **Slater, E., Beckwith, R., & Behnke, L. Studies from the Center for Research in Child Health and Development, School of Public Health, Harvard University. II. Types, levels and irregularities of response to a nursery school situation of forty children observed with special reference to the home environment.** *Monogr. Soc. Res. Child Develpm.*, 1939, **4**, No. 21. Pp. 148.—This study, containing extensive tabular and biographic material, is primarily descriptive rather than analytical. Some conclusions: children show wide individual differences in the pattern of their behavior upon entering nursery school; their adjustment to the nursery school situation improves with time; the level of their motor, intellectual, and social accomplishments increases with age; children coming from unstable, strained home situations are most likely to show unstable, fluctuating behavior in the nursery school situation.—*O. H. Mowrer* (Yale).

6556. **Speer, G. S. Oral and written wishes of rural and city school children.** *Child Develpm.*, 1939, **10**, 151–155.—Groups of children wrote answers to the question: "If anything you wished would come true, what would you wish?" Later the question was answered orally in a personal interview. 115 city and 76 rural school children of ages 7 to 15 and of grades 3 to 8 were the subjects. Wishes were placed in five categories: personal, to have things, to become something or someone, unselfish wishes, and wishes for world peace. Results for the two situations were fairly consistent, the rural subjects being more consistent than the city children. Wishes about people were less frequently made by rural children orally than in written form. "Girls expressed more wishes for things, personal wishes, wishes about other people, and more immediate wishes than boys. Boys expressed more 'to become' wishes, more wishes for peace, and more wishes for money, and for larger amounts of money than girls. Older children expressed more personal and 'to become' wishes than younger children, who expressed more immediate wishes and more wishes for things."—*C. N. Cofer* (Brown).

6557. **Stott, L. H. Personality development in farm, small-town, and city children.** *Res. Bull. Nebr. agric. Exp. Sta.*, 1939, No. 114. Pp. 36.—A study was made of the personality development of 1855 adolescents in Nebraska. These comprised 695 farm, 640 town, and 520 city children, with approximately equal numbers of both sexes in each group. The age range was 11 to 22 years. The aspects of personality studied were: (1) general scholastic aptitude as measured by the Otis group test of mental ability, (2) personal adjustment, (3) independence of decision in regard to personal problems and difficulties, (4) personal responsibility in maintaining satisfactory relationships with others, (5) rationality of thinking, (6) attitude toward work, (7) ethical judgment, (8) resourcefulness in group situations, (9) honesty in the school situation, and (10) attitude toward home life. These were measured by the use of Maller's inventory, and by other scales devised for the purpose. The results are presented in 14 tables. With few exceptions, the city group ranked highest in these personality variables. The farm home setting appeared at a disadvantage in intelligence and in the area of social relationships. The town group ranked lowest of all three in the measurement of those traits involving personal adequacy. An analysis and discussion of these results is given.—*R. M. Gagné* (Brown).

[See also abstracts 6036, 6046, 6071, 6143, 6159, 6209, 6240, 6255, 6342, 6351, 6379, 6388, 6444, 6461, 6494, 6495, 6499, 6507, 6512, 6521.]

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ADDITIONAL BIBLIOGRAPHIC SOURCES

L'Année biologique. (Ed) Fed. des. Soc des Sci. Naturelles (Pub) Paris: Presses Universitaires.

L'Année psychologique. (Ed) Piéron, H. (Pub) Paris: Alcan.

Berichte über die gesamte Biologie. (Abt. B: Berichte über die gesamte Physiologie und experimentelle Pharmakologie.) (Ed) Kleinknecht, F. (Pub) Berlin: Springer.

Bibliographia eugenica. (Eds) Davenport, C B., Laughlin, H. H., & Steggerda, M. (Pub) Cold Spring Harbor, Long Island, N Y.: Eugenics Res. Asso. (Suppl. to *Eugenical News.*)

Bibliographia evolutionis. Paris. (Suppl. to *Bull. Biol. de la France et de la Belgique.*)

Bibliographia zoologica. Zürich: Concilium Bibliographicum. (Suppl. to *Zool. Anzeiger.*)

Bibliographie der Philosophie und Psychologie. Leipzig: Heims. (Discontinued with Vol. 17, 1936.)

Bibliographie der Staats- und Wirtschaftswissenschaften. (Ed) Statistisches Reichsamt. (Pub) Berlin: Paul Schmidt.

Bibliographie scientifique française. (Section 2: Sciences naturelles et biologiques.) (Ed) Commission du repertoire de bibl. sci. (Pub) Paris: Gauthier-Villars.

Biological abstracts. (Ed) Flynn, J. E. (Pub) Philadelphia: Union of American Biological Societies, Univ. of Pennsylvania.

Child development abstracts. (Ed) Durea, M. A. (Pub) Washington: Committee on Child Development, National Research Council.

International index to periodicals. (Ed) Muench, A. F. (Pub) New York: Wilson.

Jahresbericht über die gesamte Kinderheilkunde. (Ed) Putzig, H. (Pub) Berlin: Springer.

Jahresbericht über die Physiologie und experimentelle Pharmakologie. (Eds) Rona, P., & Spiro, K. (Pub) Berlin: Springer.

Medical science abstracts and reviews. London: Medical research council.

New international yearbook (article *Psychology*). (Ed) Wade, H. T. (Pub) New York: Dodd, Mead.

Occupational index. (Ed) Hoppock, R. (Pub) New York: Occupational Index, Inc.

Psychological index. (Eds) Hunter, W. S., & Willoughby, R. R. (Pub) Princeton, N. J.: Psychological Review Co. (Discontinued with No. 42, June, 1936.) (Material duplicated in *Zeitschrift für Psychologie.* (Ed) Schumann, F. (Pub) Leipzig: Barth, and *Archiv für die gesamte Psychologie.* (Ed) Wirth, W. (Pub) Leipzig: Fock.)

Physiological abstracts. (Ed) Mellanby, J. (Pub) London: Lewis.

Quarterly cumulative index medicus. (Eds) Fishbein, M., Hutchins, M., Ashburn, P. M., & Allemann, A. (Pub) Chicago: American Medical Association.

Social science abstracts. (Ed) Chapin, F. S. (Pub) Menasha, Wis.: Social Science Research Council. (Discontinued with Vol. 4, 1932.)

U. S. Bureau of Education. Monthly record of current educational publications. (Ed) McCabe, M. R. (Pub) Washington: Gov't Printing Office.

U. S. Surgeon General's Office. Index-catalogue of the library. (Ed) Ashburn, P. M. (Pub) Washington: Gov't Printing Office.

Zentralblatt für die gesamte Neurologie und Psychiatrie. (Ed) Bonhoeffer, K. (Pub) Berlin: Springer.